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## THE MILITARY DUTY OF THE ENGINEERING INSTITUTIONS.

THERE are but few engineering educational institutions in this country that are not continuous beneficiaries of State or national aid. Over one-half of these colleges of mechanic arts receive direct aid from the national Government. With but few exceptions, the remainder receive direct or indirect support from municipal or State authorities. Endowments received from individuals and grants appropriated from public funds have been given for the betterment of the community, and not for the aggrandizement of the college. Every institution, therefore, that accepts or seeks such bounty is under moral responsibility to contribute something to the advancement of scientific knowledge, and to regard its resources and equipment as applicable at all times for the benefit and defence of the state.

The acceptance of a munificent bequest and the expenditure of a public appropriation are trusts which entail a duty upon the trustees, council, or governors of every beneficiary institution. The responsibility of supervision does not end by gathering together a competent faculty, securing the necessary equipment and apparatus, and laying out a well-regulated course of instruction for a few hundred or even a few thousand students. The duty of the college to the student may be satisfied by such a procedure. Its duty to the nation does not cease until every graduate has been taught patriotism and love of country, and has been trained to utilize, at least in part, his scientific knowledge for the defence of the

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country. There is even more than this due to the state from the engineering institutions; for the full measure of their obligations cannot be requited until there shall be found many graduates whose special training fits them for performing executive military duties.

In calling upon the colleges of mechanic arts to help in training men for military and naval duties, as well as for industrial and scientific pursuits, there need be no fear of swinging the pendulum of militarism too far. Our experience has shown that too little, rather than too much, attention has been given to the development and encouragement of martial spirit and character. It was because the profession of arms was held in high esteem and regard by the people of the South that the Confederacy was able to make the great showing that it did. If the same interest had been taken by the North in military affairs the civil war would have ended a year sooner. It is even possible that the Spanish-American war might have been averted if more attention had been given throughout the country, during the previous decade, to military training and studies. It was because Continental Europe thought that we neither desired nor were trained to fight that the United States was several times treated very cavalierly by those powers having a strong navy. It was, therefore, not surprising that Spain believed that our indifference to military affairs would prevent us from engaging in war. It was our industrial and financial resources that gave us a pronounced military advantage. It was our superior technical training and skill that caused our battleships at Santiago to overhaul armored cruisers that did not possess an efficient engineering force beneath the protective deck.

By this time our people should thoroughly understand that the best guarantee for peace is a powerful and efficient army and navy, whose directing personnel is capable of expansion at short notice from a trained and intelligent reserve. The reluctance to maintain a standing army commensurate with our requirements has been countenanced only because it has been hoped, and at times even believed, that this nation in periods of emergency could secure all the trained men necessary by simply issuing a call for volunteers. If such volunteers are good enough for the severest possible test, that of actual warfare, surely they must be good enough for peace service. The efficiency of volunteers has been repeatedly tested, and the fact has been conclusively established that experience and training are essential to the development of every recruit. It is dangerous to national safety to encourage the belief that the inexperienced, though zealous, volunteer can take at short notice the place of a man systematically trained in military duties. West Point and Annapolis

have justified their existence, and it is fatuous to reckon upon untrained men accomplishing the work done by the graduates of these schools.

The war with Spain was waged so successfully and expeditiously on both land and sea that it has probably given a majority of our citizens over-confidence as to our military security. The disadvantages under which Spain labored in operating far from a home base, and in being without funds to conduct war, cannot be appreciated by the public at large. Our advance in population, wealth, and general intelligence has had a tendency to make us feel that the semblance of an army and navy is all that is required. From this and other causes, it will probably be a long time before this nation will sanction a great standing army or a powerful navy. It will certainly not countenance extensive education by the Government of military and naval officers in the expensive manner in which the work is now carried on. As the unfortunate and unjust impression also exists that the graduates of West Point and Annapolis consider themselves a privileged class, it will be quite difficult to induce Congress to do much toward extending the scope and work of these institutions.

The army and the navy will annually require, even for peace duty, more officers than West Point and Annapolis can supply. It is hardly possible that Congress can be induced to enlarge these schools to the size demanded by the nation's requirements. As many competent officers must be secured for both the army and the navy from sources outside Annapolis and West Point, it is my belief that these military necessities can be met by calling upon the technological colleges to perform the duties which are within their power, and which in honor they are bound to undertake. In order to secure a sufficient and effective directing personnel for the army and the navy, it has been proposed to commission, from the graduates of the technological colleges, those young men who are able to complete successfully a course of technical and military instruction prescribed by officials of the Government.

It needs no argument to show that a large and skilled reserve of technical experts might be secured for the military service by placing the Government in close touch with the technological schools. Even the best of their graduates might be obtained for the army and the navy at comparatively little cost. The general Government has been exceedingly successful in founding and supporting agricultural experiment stations, where the study of agricultural problems has been systematically carried on. It is just as logical for the several colleges to undertake the work of giving these students military, as mechanical and

agricultural, instruction; and if a tithe of the success that has been met with in one case can be secured in the other, then great good must result from the experiment.

The military question is in many respects an engineering question. There are one hundred scientific colleges in this country which are capable of giving instruction necessary to fit their graduates for important engineering duties; and it is not unreasonable to presume that a majority of these institutions could give military instruction if substantial inducement were offered for carrying on the work. The more carefully this question is looked into, the more convinced will one be that in this industrial age the engineer will be the great factor in modern warfare, whether the contest be waged by land or by sea. Engineering instruction fits one for executive work; and with each succeeding year the management and control of great commercial enterprises are being intrusted more and more to those who have had technical instruction and training.

There are engineers in Europe, as well as in America, who are controlling and directing more employees than are comprised in the entire personnel of the United States navy. An engineering mind is a directing and military mind, and it can be employed for the accomplishment of strategical and tactical movements. The rapidity with which an army corps can be moved may decide the destiny of a nation; and the success of this work, under existing conditions, is more likely to be dependent upon the superintendent of a railroad than upon a military commander. The executive ability of the managing engineers of our great industrial plants, in expeditiously furnishing munitions of war, may be of greater benefit than the enrolment of an army corps. As for the development of the future naval officer, President Roosevelt has declared, after careful study of the question, that he must be "a fighting engineer."

In analyzing the thoroughness and completeness of technical instruction Mr. William D. Ennis thus speaks, in "The Engineering Magazine" for November last, of the consequences of engineering training:

> It gives thoroughness first of all, for no progress is possible in mechanical operations without thorough mastery of each step. It gives a command of details. It develops a graphic habit of thought, an ability to picture abstract things, and to make mere conceptions real. It emphasizes the necessity of recording, transcribing, comparing, and perfecting one's observations until the elementary facts have been clearly sifted out and the basic principles mastered. And at no stage, especially if coupled with rational and competent scientific study, is it other than broadening to every faculty of the mind. More than all these, it creates the courage and ability to grapple with new conditions with a confidence born of a thorough understanding of the natural laws involved, that unerringly define, limit, and control even uninvestigated phenomena.

It is because the management and control of vast enterprises have been drifting into the hands of the engineer that the commercial and industrial prosperity of the country has been secured. To succeed in engineering work one must have the ability to design, and the will and resource to execute. The future will show that he who is most competent to direct is also best able to plan. Those who by force of will, character, and attainments possess such attributes are fully competent to grasp the fundamental principles of military science and tactics; for many of the qualities demanded of a great engineer are identical with those essential to successful military command.

It is also demanded of the military commander of this century that he shall possess administrative qualities. Not many years ago a careful investigation showed that every graduate of West Point and Annapolis who voluntarily resigned his commission achieved success in civil life. As one contemplates the fact that the military-naval graduates possess a training which fits them for industrial pursuits, and that at least a third of the graduates of the engineering institutions enter upon vocations which are more of an executive than a technical nature, it is evident that there is not a wide difference separating the work of West Point and Annapolis from other technological institutions.

With each succeeding year the curricula of the military and naval academies have more closely approached those of the best schools of technology. At the present time, therefore, it can be confidently asserted that there are scores of institutions that could carry on, at least in part, the work that is now done at Annapolis and West Point. Paradoxical as it may be, there are two scientific institutions in this country that give a better course in naval architecture than the one given at the naval academy. There are at least four colleges that possess as complete and extended a course in marine engineering as the one established at Annapolis. This is because the technological colleges spend more money and employ more men in the undertaking. There are a dozen institutions whose course in electricity far surpasses that given either at Annapolis or West Point. As for the courses of instruction in modern languages, physics, chemistry, and applied mechanics, there are a score of colleges that devote as much time to instruction, and that possess laboratories as complete as those at the Government schools. At the naval and military academies much time must necessarily be devoted to professional studies; and yet in after life a good part of this advanced professional instruction is utilized by specialists only.

There may be a difference of opinion as to whether the Government

schools are giving more recognition to the applied sciences, or whether the scientific institutions are seeking to give more prominence to the enforcement of discipline and to the physical development of the undergraduate. The success of the Annapolis and West Point graduates along commercial and technical lines, and the high state of efficiency and discipline maintained by military officers who have been educated and trained in technological schools only, demonstrate that the general character of the educational work of the Government institutions and the schools of technology is not widely separated. In fact, it is because the work of the engineering and military professions is strikingly similar in many respects that there cannot be a fundamental difference in the training and education of those who seek such careers. The following points of comparison are worth noting:

(1) In the military and naval services, as in the engineering profession, the work of every man, from the humblest to the highest, is likely to come under the direct scrutiny of his peers, by whom its merits and faults are easily discerned, and upon whom his preferment is often directly or indirectly dependent. (2) Neither the soldier, the sailor, nor the engineer pretends that there are any mysteries in his profession. All three recognize the truth that it does not pay to keep professional secrets, but that special information that has been acquired should be communicated directly to all in the profession. (3) As in the military and naval so in the engineering profession, no two problems are generally alike. Specific differences will exist that will make each work a special study, and bring forth the best that is in the individual. (4) What has been said in "The Engineering Magazine" of the engineering profession will also apply to the military or naval, as to the requisites for success:

> These methods of successful management are not dependent upon unusual talents or abilities, but rather upon high and rigidly-adhered-to ideals of conduct and usefulness. They involve a patience with, and command of, details; the ability to grasp salient points, to analyze and classify data; readiness for emergencies and unfamiliar conditions; a progressive spirit; resourcefulness, of self and in subordinates; and, more than all, the faculty (and desire) to use men of ability by gaining their interest and coöperation, and, having ascertained their most efficient field, by trusting them without interference.

(5) The world also judges the work of the engineer and the military commander alike. The public cannot see when experts of other professions make mistakes, as their errors can be hushed up and remain secrets forever. Errors of the engineering and military professions never escape public criticism. If a bridge falls, a dam breaks, a boiler bursts, or an engine fails to do the work for which it is designed, the fact can-

not be hid. In the same manner military weaknesses and errors of judgment are patent to the people at large. Success must be achieved by the soldier and engineer; for failures are never forgiven.

(6) The greatest tribute that can be paid to the work of the naval, military, and engineering professions is to mention the fact that there is a high standard of integrity and honor existing among the members. Particularly can the noble words of Ruskin be applied to these three professions:

> And so with all other brave and rightly trained men. Their work is first, their fee second — very important always but still second. And with some people just as certainly the fee is first and the work second, as with brave people the work is first and the fee second. And this is no small distinction. It is the whole distinction in a man; distinction between life and death in him, between Heaven and Hell for him. You cannot serve two masters; you must serve one or the other. So then you have it in brief term; work first, you are God's servant; fee first, you are the fiend's.

(7) As physical and moral courage are essential to the engineer in the performance of efficient work, an engineering training does not unfit one but aids him for future military duty. It is significant that the most courageous individual act performed in the naval service during the late war was the conning of the *Merrimac* to the channel of Santiago harbor. The man selected for this dangerous mission was a naval constructor, a static engineer, who, although a graduate of Annapolis, had practically never performed executive line duties as a commissioned officer previous to undertaking his heroic and brilliant deed. The distinguishing act of personal valor performed by one connected with the army, and one which was productive of immediate and exceedingly important results, was the capture of the Philippine commander-in-chief by a commissioned field officer, who less than four years ago was a subordinate official in the Agricultural Department. This matchless deed, wonderful in its conception, and startling in its execution, was the work of a graduate of an agricultural and mechanical college. It is strikingly suggestive that it was reserved for these two men, whose development and training were along engineering lines, to typify best the nation's ideal of signal gallantry and heroism. These examples are the most brilliant of the many that could be given of the aptitude and adaptability of an engineering mind for military duties. The successful manner in which the former engineer officers of the navy qualified for line duties may afford confirmatory proof of how closely allied is mechanical engineering to military science and tactics.

The tendency of the engineering and military professions to work along similar lines is also evidenced by the fact that the world now

speaks of the greatest of the business and engineering leaders as "captains of industry," and regards the best military commanders as able administrators possessing engineering and constructive minds. This tendency, even to an interchange of title upon the part of the military and engineering organizations, shows the trend of events. The nation which will thus recognize the fact that there is a great military reserve strength in the engineering element, will command a military advantage that may be of incalculable benefit in time of war.

The advantages accruing from having the scientific institutions undertake the work of doing some military duty would be of a threefold nature: (1) It would aid, in a practical way, the engineering student; (2) it would be of material benefit to the scientific colleges; and (3) it would be a military gain to the nation.

Many students would undoubtedly take a course of instruction that had met with the approval of either the War or the Navy Department, since they would be assured that such an engineering course would be a very practical one. There would be substantial reward awaiting those who successfully completed the course, since students successfully passing a prescribed examination would be given a probationary appointment in either the army or the navy. While serving as officers during this probationary period, not only would they receive advanced practical instruction, but the experience acquired would be of value to them throughout their lives. It would also undoubtedly be the policy of both the War and Navy Departments to establish post-graduate courses of instruction for the young men entering the services from institutions other than the military and naval academies.

The admission of the graduates of such institutions into the army and the navy would not only provide an additional field of employment for the best of such men, but would immediately awaken a spirit of emulation among all those whose work is to be subjected to the practical tests of an examination almost absolutely uniform for all parts of the United States. The reaction of such a competition upon the military and naval academies would not fail to be highly beneficial to these national institutions.

The benefits to the scientific colleges and technical institutions would be of a progressive nature; for in stimulating the student and developing the study of the arts and sciences, the curriculum would be improved to a remarkable degree. In general, it may be said that the following direct advantages would be derived by the engineering institutions: the efficient and thorough supervision of engineering instruction; the com-

missioning of their graduates in the military and naval services; the assistance of the national Government in the establishment of mechanical laboratories by the loan of machines and appliances which would be of great value for educational purposes, and yet unserviceable for use on shipboard or in the camp; the encouragement afforded by bringing the colleges into friendly competition with the academies; the establishment and development of successful technical schools in commonwealths where such colleges of mechanic arts and sciences do not exist.

The scientific colleges would certainly be stimulated by undertaking this military work. Before the successful establishment of such colleges, we were greatly dependent upon foreign-trained men and aliens for this service. Can it be doubted that it would be wise to establish an effective system of supervision and support for these institutions, to the end that their graduates — already the picked men of the country in a mechanical sense — may be turned toward Government needs and possible Government service, and that they may be stimulated to devise and invent appliances which shall make our arms irresistible on land and sea? In France and Germany, two or three years of the best part of a man's life are exacted in the performance of military routine duties. What a great waste of force and what an enormously increased taxation in consequence! How much better it would be to give thousands of selected young men a scientific and military education wherein they might be taught only the underlying principles in the art of war!

The national Government would also be the recipient of substantial benefits by such a course of procedure. Not only would there be secured a great technical reserve, which could be utilized in time of war, but scores of schools would be in a condition to educate men to replace even this reserve, if the exigencies of the nation should demand such action.

It seems obvious, too, that the presence in the army and navy of a considerable number of officers drawn directly from civil life, after they had received their training in other than Government schools, would be not only of advantage to the military and naval personnel, but would serve to awaken and maintain among the people of the country a healthy interest in both services.

Oliver Wendell Holmes has somewhere happily said: "A man's mind is now and then stretched by a new idea, and does not afterwards shrink to its former dimensions." So it will be with those pessimists who believe that honest criticism of any institution tends to abridge its work. When the young cadets from Annapolis and West Point also came in contact with technical students, whose preceptors had been the distin-

guished college presidents of the country, there might be a stretch to the intellect of these young officers which would result in good to themselves and to the military and naval services. And when the young college graduates came under the discipline of experienced and cultured military and naval officers, and learned how to obey as well as to command, there might be a stretch of their usefulness and powers which would be noticed and commented upon by their classmates in civil life.

In bringing the graduates of Annapolis and West Point into competition with the young men from outside life, a healthy rivalry would be created between the two military schools and the scientific institutions. It may be that the academic boards of West Point and Annapolis, as well as the trustees of many scientific institutions, will have very little inclination to encourage extended military training and instruction. If either the naval or military academy has any doubt as to its ability to send forth, for military duties, men superior to those sent out by the engineering colleges, then something is radically wrong with their course of instruction. As the college, as well as the citizen, owes a duty to the nation, a responsibility rests upon the technical institutions to undertake the work; and they would not dare resist public sentiment upon this question.

Great results are thus involved in the question of securing a sufficient and trained reserve for the defence of the nation. It is now recognized that the wars of the future will be largely determined by the character and nature of the training secured by the directing personnel. If the leading scientific colleges can be made to understand that a military duty devolves upon them, then a great impulse will be given to the patriotism of our young men of severe educational and technical lines, since they will be made to feel that the very skill they are acquiring for life-work and peaceful industry will also best fit them to become the chosen defenders of their country in time of trouble.

Within the last three years it has been found necessary to increase the number of cadets at both West Point and Annapolis. Until this increase was authorized, the number of graduates sent forth was not even sufficient to make up for the losses incident to the naval and military services. In fact, the rigidity of the examinations had, if anything, to be lessened, to help in providing a sufficient number of commissioned officers for existing needs. So far as the navy is concerned, it will require at least six years before Annapolis can send forth sufficient graduates to bring the total commissioned personnel of the service up to the number authorized by law. With respect to the army, hundreds of

young men have been commissioned in the regular service during the last four years, there being no graduates from West Point available for existing vacancies. At least two hundred graduates from the scientific institutions have received commissions in the army, and they give promise of developing into exceedingly efficient and desirable officers. As a matter of fact, the military service has been compelled to go to these engineering institutions for commissioned officers; but who can deny that these young men would have been better fitted for a military career if they had had the training and education herein contended for?

The requirements of the army and navy as regards commissioned officers cannot be met by Annapolis and West Point. The work can be carried on only by many technological colleges of the land, under the direction of master-minds acquainted with our military needs and having some knowledge of the power and influence of university work. Under the control of the Secretary of War and of the Navy, there should be efficient and thorough supervision of this scientific and military education; and the maintenance of all such educational courses would be carried on in a manner satisfactory to the Government. If this were done, it would be a step in the direction of coördinating American universities and colleges. It would raise the standard of the inefficient institutions by stimulating emulation and encouraging a comparative study of different methods of instruction. Scientific instruction of a high grade is already provided by numerous institutions in many parts of our country. The range and quality of their work have immeasurably advanced within the last few years, and several now take rank with the best institutions of their kind in the world. These colleges have made wonderful strides along educational lines; and their faculties make the proud claim that their graduates are the equals in culture and intelligence of those sent out by the colleges of liberal arts.

During the last ten years I have discussed this question with distinguished educators, prominent statesmen, and able military leaders, and it seems to be the general opinion that the good of the nation demands that some such action should be taken. One distinguished Southern educator declares that "such a measure would be founded upon patriotism and common sense." The lamented General Francis A. Walker, of the Massachusetts Institute of Technology, was very earnest in his desire to have his institution perform some military duty for the nation, and, in writing to me upon the subject, said: "Whether looked at from the point of view of one interested in the political, military, or naval history of our land, the subject concerns the defence of the country."

At least three-score of college presidents have been consulted in regard to the general work of bringing their institutions to a clearer sense of their military obligations to the state. It is practically their unanimous testimony not only that the work is in the interest of sound technical education, but that the greatest beneficiary would be the national Government. When such conservative forces are aroused to the necessity of this work, it must be manifest that it is of import to the nation. It is of marked significance that this proposition appeals most strongly to those college presidents and professors who were formerly identified with either the military or the naval service. These men, from personal experience and association, realize that mutual benefit must be secured by bringing all scientific institutions in closer touch with each other and with the military and naval authorities.

It is, therefore, time for a plan to be formulated whereby the engineering institutions can render the important military duty to the nation that is within their power to accomplish, and that ought to be within their desire to perform. As it is to be expected that Congress will be more inclined to follow than to attempt to direct public sentiment upon this question, the matter must be taken in hand by the immovable sanity of military officials and scientific educators. A joint commission composed of two officers of the army, two of the navy, two representatives of the land-grant colleges, and two representatives of other scientific institutions, with some former Secretary of War or the Navy as chairman of the body, should be appointed. Within a year this commission could formulate a scheme whereby the scientific institutions of the United States could supplement the work of West Point and Annapolis, and whereby it would be possible to secure for the future a reserve of highly trained technical men who would receive at least the principles of a military education.

Even to meet the issue of war with Spain we had to increase our army tenfold. It is well known that, despite the enormous advantages that we possessed over our foe, we had to keep our troops for months in camps of instruction. In fact, it took so long to work these volunteer regiments into shape that the army which besieged Santiago was practically composed of a good part of the regular army, and but few regiments of volunteers. Such delay would have been, in part, obviated if our engineering institutions had done the military duty that was within their power, and if the nation had utilized the educational forces that were within reach.

Both the War and Navy Departments can greatly aid this military

educational work by lending to the several scientific institutions such spare implements, models, and machines as are no longer useful to either service. A machine of antiquated design, and no longer efficient, is often the best model for illustrative and educational purposes. That appliance which could be consistently condemned by reason of its want of reliability might be exceedingly useful in the laboratory for imparting instruction, and for illustrating our military development. During the last ten years appliances have been destroyed at the arsenals and broken up at the navy yards which were without value for the original purposes intended, but which would have been gratefully received by the engineering colleges, and would have been of substantial benefit to them. The transfer of such articles ought to be made practicable by a law of Congress; and it is to be hoped that the nation will soon realize the great benefit to be derived by utilizing, for educational purposes, discarded implements of warfare.

War is now a business as well as a science. For occasions of emergency a reserve of supplies, of men, and of officers must be provided. It is not expected that our arsenals and navy yards can supply sufficient material and stores for war purposes. It is for this reason that the national Government encourages private firms to engage in the manufacture of guns and ammunition, as well as in the building of warships. As for the supply of armor, it is altogether secured from outside parties. The national and State Governments expend millions of dollars in training a volunteer force, and the primary purpose of establishing such an organization is to have in readiness at least a partly trained reserve for the needs of the nation. It is, therefore, necessary, as well as logical, to train a reserve of officers; and there seems no better way of securing this desirable result than by utilizing the great resources that are possessed by the educational institutions of the land.

If this proposition were fully understood, it would appeal to the young men of America now receiving instruction in the several colleges of mechanic arts and sciences. These young men are strong in their own self-respect and ambition, and are intense in their love of country; and, if necessary, their conscience will impel them to offer their all for the honor of the nation. Their education should be directed so that the best within them can be brought out; and I know of no better way of training them to become noble men than that they shall be made to realize that they are receiving a military as well as technical education while in the glory and strength of young manhood.

GEORGE W. MELVILLE.

## A NEW ERA IN MEXICO.

No more suitable place could have been found for holding the Pan-American Conference than the City of Mexico, the capital of the Republic which holds the position of a natural mediator between the United States and Latin America. While the sentiments of the Mexican people are still considerably colored by the historic hatred of 1847, their interests have been gradually drawing them closer and closer to the United States. The Government and the leading classes do not fail to recognize the great advantages derived by Mexico from the investments and enterprise of their northern neighbors. They are exceedingly anxious to encourage the capitalists of foreign nations to furnish means for the development of the rich resources of Mexico, and are willing to do their best to remove any obstacles that may be in the way of honest activity in this direction.

Until quite recently Mexico was not regarded as a safe place for commercial and industrial investments. Its potential wealth was recognized, and the possibility of unusually large returns from Mexican investments was well known; but the political conditions were too unsettled. It was difficult to find men of character and standing who had long experience in Mexican affairs; and the methods of the ordinary Mexican promoters were so untrustworthy that Mexico became in the minds of most people the home of wildcat schemes and South Sea bubbles — a view which there was much to justify. The promoters — whom the Mexicans significantly call *filibusteros de banco* — were doubly unscrupulous, as they knew the general unfamiliarity of the public with things Mexican, and therefore engaged readily in unsound enterprises without fear of speedy discovery. Harold Frederic, in his story, "The Market Place," recounts the history of an undertaking of this kind — an actual venture which came to its ignominious end only a short time ago.

But things have changed and a new era has begun. In political affairs a régime of security and stability has been gradually established by the group of able men who are controlling the Government. Under the

leadership of the veteran President they form a powerful, well-organized party within which personal ambitions are loyally subordinated to public ends; and the eventual successor to President Diaz is already practically determined upon, so that the fear sometimes expressed lest upon the death of that great ruler the country should be in danger of a revolution has no reasonable foundation in fact. With respect to the security of titles and the protection of life and property, Mexico at present leaves little to be desired. Moreover, conservative business methods are being adopted, and men of the soundest financial standing are beginning to interest themselves extensively in Mexican industry. Enough experience has been gathered so that the investor may avoid costly mistakes, while the avenues to great success in the exploitation of the natural wealth of Mexico have not yet been closed, and the most tempting opportunities remain.

It is, therefore, reasonable to expect that the next decade will witness unusual progress in Mexican industrial life. In mining, systematic methods of prospecting and surveying are being employed; water power is being investigated and developed; and the railway system of the country is receiving important additions, opening up promising regions that were hitherto almost inaccessible, and thus giving an impetus to the development of the rich agricultural lands of Southern Mexico. Indications of progress along these lines are afforded by the formation of large prospecting companies backed by the most conservative American and European capital; by the establishment of the great water-power plants of Mexico City and Orizaba; by the opening of scores of tropical plantations; and by the movement of railway consolidation and construction now in progress. Thus, the National and International railways are to be united so as to form a single broad-gauge line between the northern boundary and the city of Mexico; while the railway known as "the Mason Line" will connect the Mexican systems with the Isthmus of Tehuantepec and open up the way to the Central American Republics.

The actual industrial situation at present is somewhat overclouded on account of the contraction of the currency. Exchange in Mexico during the summer of 1901 was in the neighborhood of 216, *i.e.*, 216 dollars silver for 100 dollars gold. As Mexican dollars are more valuable in China and the Philippine Islands, large quantities of them were shipped to Asia; consequently the Government, in fear of an impending crisis, was induced to prohibit the exportation of silver coin. In some respects the foreign investor is benefited by the high rate of exchange, as the price of labor, of land, and of supplies does not rise so rapidly as

the bank rate. The ordinary disadvantages of a fluctuating and depreciated currency are therefore counterbalanced, in the eyes of the foreign capitalist, by the increased purchasing power of his investment.

Another cause for apprehension on the part of the Government is found in the over-development of certain manufactures, notably the textile industry. Great hopes were recently entertained in this respect, and large establishments for the manufacture of cotton and wool were established at Mexico, Orizaba, Queretaro, and Puebla. But in the last five years the demand has not kept pace with the supply; in fact, the capacity of the Mexican people for the consumption of manufactured goods has been in the past generally over-estimated. When the mere numbers of the population are considered, the country seems to hold out great promises to the manufacturer. But the purchasing power of the Mexican masses is strictly limited; three-fourths of the population being native Indians or half-breeds, whose wants embrace nothing more than a linen suit, a serape, a sombrero, the plainest of food, and the cheap native drinks of pulque or aguardiente. Their wants are not expansive, and they are too conservative readily to learn the use of new conveniences. Whenever wages rise, the increase is spent mostly in spurts of riotous living, and there is no idea of adding to the true comforts of life. The mere figures of the Mexican population census are, therefore, not a safe guide for the merchant or the industrial investor.

It is in commerce and in the exploitative industries, rather than in manufacture, that the greatest opportunities are to be found. The commercial houses of Mexico, like those of South America, are large and sound and are mostly in the hands of foreigners. Thus, the Germans practically control the trade of hardware and drugs, and a great share of that in machinery; the French and Spanish incline more to dealing in wines, groceries, jewelry, and textile goods; while the largest banks are managed by English capitalists. The Americans do not engage in commerce to a very great extent, as they are rather slow in acquiring the language and in establishing direct and intimate relations with the Mexicans. Still there are some large American banking houses, and most of the electrical machinery used in Mexico comes from the United States. Railway transportation, both by steam and by electricity, is managed by English and American capital. Three-fourths of the engineers and all the conductors on the lines north of Mexico City are Americans.

It is, however, in the natural industries — in the development of the natural resources of Mexico — that the greatest progress may be fairly anticipated for the coming decade. A very promising industry

is that of the manufacture of fibre from the maguey and also from the leaves of the pineapple plant. As the maguey plant after the extraction of the pulque was formerly considered pure waste matter, this industry is a clear gain to the country. The fibre, called ixtle or henequen, is manufactured into ropes, bagging, and coarse textiles for garments, and constitutes one of the chief articles of export from Mexico.

Formerly mining was even more of a lottery in Mexico than elsewhere. Between the original owner and the mining promoter, the investor usually had the too simple pleasure of adding directly to the resources of the country, without even a modest commission to himself. But at present the most scientific methods are employed in prospecting and in the survey of mines. Men with small capital still have some opportunity of picking up valuable property, especially in such remote regions as Oaxaca. This, however, will not last long, as large companies, with millions of capital actually paid in, are now making preparations for a thorough and systematic survey of the mining properties of Mexico.

The line of development in which foreign capital has most recently become interested is tropical agriculture. It is a well-known fact that the Mexican haciendas have been among the steadiest and best-paying undertakings on the American continent. But as agriculture requires very close touch with the laboring population, which the Mexican planter handles with great ease, but which to others is an uncertain element, foreign investors until very recent times did not make use of the opportunities afforded by the rich lands of the Republic. The lands of Mexico may be divided into four classes — mountain lands, highlands, lowlands free from inundation, and lowlands subject thereto. At least two-thirds of the superficial area is composed of mountain lands, the higher of which are barren and suitable for grazing only. The lower mountain lands, the *tierra templada*, contain some of the richest of the older haciendas, and are especially suitable for the cultivation of pulque. But it is in the lowlands, the *tierra caliente*, that the true future riches of Mexico will be found. The quantity of first-class tropical land is, however, comparatively small, as the lowlands in Northern Mexico are visited by long and destructive drouths, while a great part of those in a more southerly latitude are subject to periodical overflows which are an obstacle to regular cultivation.

It is the belt between the mountains and the lowlands along the sea, between the northern region of drouth and the frontier of Guatemala — or in other terms, the land south of Jalapa extending across the Isthmus

of Tehuantepec as far as the states of Campeche and Chiapas — that contains the greatest promise of future development. Alexander von Humboldt especially emphasized the fertility of the *Sotavento*, the southern part of the state of Vera Cruz, whose productive capacity he estimated as being twice as great as that of the best Cuban lands. A large river system gives this region abundant irrigation throughout the year; serving also as an easy route of communication to the various parts of the country. The passing traveller gets an inkling of the fertility of this land when he sees that all the fences are composed of trees, which upon close inspection turn out to be simply pieces of wood set in the soil. They have readily taken root and brought forth branches and leaves like the rod of Moses. For at least three centuries this country has lain fallow and prepared itself for a great future harvest. It was formerly the home of a high civilization, as is witnessed by the remains of buildings and pottery that are found even in the densest of its forests. Its climate is not unfavorable to the repeopling of its woodlands and plains. Few Europeans and Northerners who are at all careful in their habits are here attacked by any malignant disease; most of them enjoying the best of health. The facilities of transportation, on the other hand, still leave something to be desired, as the railroads are not well enough ballasted to resist the downpours in the rainy season; but great improvements have been already accomplished. The new railroad already mentioned, which will connect Vera Cruz and Mexico with the Isthmian line, will pass through the centre of the richest belt of tropical lands; thus affording better means of access to this whole region and rendering it possible for the traveller to avoid the sea coast entirely.

As lands in the Valle Nacional and around Cordova are at present worth as high as $150 an acre, the price of the lands farther south will undoubtedly rise rapidly in consequence of their increased accessibility. At present excellent land can still be bought in large tracts for from three to five dollars an acre. The titles to real property in this region, as in many parts of Mexico, are, however, very much confused. There are innumerable claimants to every desirable tract. Neighboring towns assert communal rights, while individual squatters rely upon prescription through long occupancy. The various claims of these corporations and individuals have to be bought up by the intending purchaser of the land. The service of clearing up the titles is performed by the large land companies of Mexico City. These purchase the various outstanding titles or claims and finally obtain a confirmatory grant from the federal Government, which renders the title as secure as could be desired. It would,

however, be very unsafe for a private individual not thoroughly familiar with the situation to purchase lands from the natives. Only by the most careful methods can long and tedious title litigation be avoided.

The lands of Southern Mexico produce all the staple tropical products — sugar, cocoa, coffee, vanilla, pineapples, oranges, bananas, and rubber.

With respect to sugar, the situation of Mexico is made unusually favorable by the high import tax of fifteen cents silver per kilo. A great many natives are engaged in the cultivation and manufacture of sugar; but their machinery is of the most primitive kind. Thus the entire sugar mill of the large estate of Nopalapam in Vera Cruz consists of a building no larger than an ordinary barn. The native planters lack the capital and the progressive spirit necessary for drawing the full industrial benefits from their extensive estates. The ample and easy living which their bountiful acres yield, and the social consideration accruing from the ownership of a large hacienda, satisfy them and render them disinclined to go to much trouble or to incur debt for the purpose of enhancing the productivity of their plantations. The lands of Southern Mexico are counted among the most fertile sugar regions of the world. Yields of as high as sixty tons of cane per acre are reported, and a yield of from thirty to forty tons is considered quite ordinary. As the planter may obtain from six to eight cents silver per pound for his product from the wholesale dealers, and as the cost of cultivation and manufacture ought not to exceed three or four cents a pound, the margin of profit is an exceedingly liberal one. However, on account of the expensiveness of machinery and the large amount of labor required, an impecunious planter could not hope to succeed. There are no central sugar mills established to which he could sell his cane; and even were he to erect a moderate-sized mill, he could not in the long run compete with the large modern sugar refineries that are being operated on the great estates.

The reformation of the Mexican sugar industry along modern lines is just beginning, and the first well-equipped plantations are reaping wonderful returns. One of the best known of the new plantations is the San Cristobal, on the Papaloapam River, in Vera Cruz, controlled chiefly by Mexican capital. It is provided with the most complete machinery, which is capable of manufacturing into sugar the produce of 5,000 acres of cane. About a score of foreign corporations, chiefly American, are also beginning operations on a large scale; while numberless smaller companies and individual planters are endeavoring to catch the tide before it ebbs back to the level of the sea. One of these smaller planters

recently succeeded in paying for the whole of his machinery out of the crops of two years. As cultivation of sugar on a large scale increases, the profits will of course diminish, and the smaller concerns will find themselves crowded out. Still for a decade to come even they may hope to draw some gain from the advantages of the situation.

Excellent coffee is being raised on the higher lands of the tropical belt of Mexico. In this culture, too, large capital is necessary on account of the expensive character of machinery and the large quantity of labor required in harvesting the berries and preparing them for the market. A product that is looked upon with much favor, because it does not necessitate a long process of manufacture or treatment, is cocoa, which is cultivated in this region with comparatively little labor and small expense. The cultivation of tropical fruits has not yet been undertaken on a large scale, partly on account of the absence of rapid and regular means of transportation. Some plantations are, however, canning their fruit for the Mexican market, where it brings very acceptable prices. The finest grade of tobacco is raised in the Valle Nacional, near Tuxtepec, and in the Tuxtla district. The choice lands in this region have been, however, all taken up, and command very high prices.

A product about which there is much discussion, uncertainty, and doubt, but, on the other hand, much hope and the expectation of remarkable returns, is rubber. The *Castiloa elastica* is indigenous in this region; but the natural bearing trees have been practically exterminated by the careless manner in which they have been tapped by the rubber hunters. The artificial culture of rubber has now been undertaken on a large scale; though it is often argued that the natural supplies of Brazil, Peru, Africa, and India are so abundant that artificial cultivation will not be profitable. There are several facts, however, which we ought to consider before dismissing the culture of rubber as an inadvisable undertaking. In the first place, large parts of the South American and African forests have been practically destroyed by careless cutting. The supply that remains is abundant, but it cannot be obtained without considerable expense. The rubber of Brazil, after being gathered by the natives, passes through the hands of numerous merchants along the Amazon, whose profits as middlemen go to swell the price of the product until it reaches the hands of the jobber. In Peru and Africa the difficulties of transportation multiply the original trivial cost manifold.

It is, therefore, quite generally believed that in an accessible and fertile country like Southern Mexico rubber can be raised more cheaply than it could be obtained in the aforementioned regions. There the

rubber trees are scattered through pathless forests; here they could be grown upon comparatively small areas, so that the cost of gathering would be materially reduced. But while rubber culture on a large scale has been commenced in Mexico, it is nowhere old enough to prove what can be done. It is still largely in the experimental stage. The confidence of many people has been shaken by such unsound enterprises as the India Rubber Limited; but, of course, instances like this prove nothing concerning the culture itself.

Young rubber trees grow very rapidly and produce at an earlier age than the Brazilian variety. When tapped at the age of four or five years they already yield half a pound of rubber; at the age of from seven to ten a double amount is obtained; after that the yield increases rapidly. Basing their calculation upon these results, many companies have planted large areas with rubber trees. The states of Vera Cruz, Chiapas, and Campeche contain at least two hundred new plantations upon which the cultivation of rubber is being tried. There have been many experiments with respect to methods of planting. Whether the trees are to be set out in the shade of a forest, or upon cleared lands in the full glare of the sun; whether the nursery system is to be employed; and at what distance apart the trees are to be set when ultimately planted — all these are questions upon which the opinions of individual planters differ widely. It seems, however, that any calculation which contemplates the permanent cultivation of more than two hundred trees per acre is extravagant. As the New York price of Central American rubber during the last year was from sixty to seventy cents a pound, very large returns may be reasonably expected by planters who have a sufficient amount of capital and endurance. The chief advantages of rubber culture are, that beyond the necessity of guarding them the trees do not need much care after the second year; that comparatively little labor is required in the harvesting; that no manufacturing process by machinery is necessary; and that the product is at least for a time practically imperishable. The excellence of the rubber trees native to Mexico is shown by the fact that the seed of the *Castiloa elastica* is much sought after by the planters of Ceylon and India.

The chief difficulty encountered by the planters of Southern Mexico is the absence of a steady and abundant supply of labor. There are natives enough living in the region to furnish all the labor needed for a long time to come; but their wants are so few that but a small proportion of them care to work hard on a plantation. As laborers they are docile and willing, but shiftless, unenergetic, and of little intelligence.

While the region is free from serious crimes, and large sums of money are constantly transported from place to place with no thought of danger, the native population is much given to petty thieving, which causes such crops as pineapples and vanilla to melt away almost beneath the eyes of the proprietor. The price of labor has practically doubled within the last three or four years. While but recently a laborer could be hired for fifty cents silver a day, with an additional twenty-five cents for his keep, at the present time wages in some places are as high as a dollar and a half silver per day. This is due to the competition among the many plantations that have been recently established.

The manner of procuring labor on the Isthmus is quite unique. Twice a year, in September and February, large feasts are held at the larger towns. These are attended by all the *mozos*, or native laborers, of the region. The planters, too, repair to the seat of festivities. They come laden down with sacks of money, which they lend with lavish hand to any laborers who may apply to them, or whom they can induce to become their debtors. The dollars thus lent readily take wings amid the attractions of the fair, and when the last fumes of enthusiasm and aguardiente are leaving the *mozo's* brain, he finds himself the bond slave of the obliging planter who so readily advanced him the money. He becomes one of the planter's *cuadrilla*, or gang, and works on the plantation until the time of the next feast. Under this system the planters are obliged constantly to maintain agencies for the enlistment of laborers, and they find themselves twice a year under the necessity of practically renewing their entire labor force. Of course, the old Mexican haciendas, with their settled *peon* laborers, who are kept in check by the moral suasion of the hacienda priest, know little of the difficulties that confront the foreigner who has to hire his labor from season to season.

To relieve this situation, a movement has been started to import coolie laborers from Asia for the use of the large plantations. Negotiations with the Indian Government have, however, so far been unsuccessful. But an American corporation has developed a most comprehensive plan of labor supply. A navigation company is to bring Chinese coolies to Mexico, where they are to be employed at first in the coast fisheries belonging to the corporation. From among the coolies thus imported the company will furnish laborers to the plantations on a five-year contract at the price of thirty-five dollars a month each. In order to avoid possible difficulties in obtaining laborers, the corporation has enlisted the coöperation of the "six great companies" of San Francisco. Moreover,

in order to make the stay of the coolies agreeable to them, it will import provisions and articles of personal use from the Chinese Empire, and will furnish them to the laborers from its own stores. The labor gangs are to be placed under Chinese foremen, so that the plantation manager will be relieved of all trouble in hiring and directing the men. The adoption of a system of this kind is imperatively necessary if tropical agriculture in Mexico is to succeed on a large scale. The present labor supply is too uncertain, and this uncertainty, especially during the time of harvest, might result in irreparable loss to the planter. The Mexican Government itself recognizes this fact, and is ready to assist any honest enterprise that will provide a solution of the difficulty.

From all that has been said it will be seen that Mexico is not a land for the investor of small means. As a farmer could not himself do heavy manual labor in this climate, he would have to make liberal use of hired help. His expenses of management would, therefore, be practically as high as those of a large plantation. The original cost of the land, when reckoned as including the expenses of clearing and planting and of caring for the crop until its maturity, amounts to a large sum per acre. Should he desire to plant rubber, the farmer must wait for at least seven years until his returns begin to come in; while for the other cultures he would need expensive machinery. Companies and individual planters with large capital, however, would have far to seek at present to find a more promising field for investment and a more desirable locality than Southern Mexico. An individual planter with ample means always has a great advantage in being able to supervise the employment of his money in person, and to make sure that his funds are actually applied to the improvement of the soil. A conservative, well-managed company would, however, also be certain of success in this region. Companies exploiting other parts of the tropics, as for instance, the Dutch companies operating in Java, or the Belgian companies in the Congo Free State, often pay as high as fifty per cent dividends upon the capital invested.

But it cannot be overlooked that the methods employed by some of the companies at present operating in Southern Mexico are by no means calculated to yield such results to the shareholders. Not infrequently more money is spent in advertising the stock and paying salaries to the directors than is put into the soil. Moreover, as insufficiently trained men are employed as plantation managers, costly experiments are made, and no consistent, well-considered policy is pursued. The statements of advantages furnished to the public are often extravagant. Returns obtained under unusually favorable circumstances are taken and applied

to the total acreage of the company; while, of course, the fertility and quality of any tract in this region are just as little uniform as they are in any other part of the world. Together with the lavish expenditure of funds by the home office there often goes a disastrous policy of retrenchment on the plantation. Next to attempted economies in the remuneration paid to expert management, the worst mistake that can be made is the purchase of second-hand machinery in the hope that somehow it may do the work. In these various ways some of the companies whose prospects would otherwise be good are ruining their chances for success, and before long their plantations may be for sale at a rather low figure.

It is, however, certain that the money which actually goes into the soil will bring the most gratifying returns if employed with a thorough understanding of the local conditions; and it also admits of no doubt that, with the impetus which has now been given, nothing can retard the development of the agricultural resources of tropical Mexico. It would be well for all concerned if there could be formed a society of tropical planters, in order that some of the questions which inevitably arise, and which have been alluded to above, might be confronted and solved in a more systematic manner. Moreover, for the protection of the general public, there should be formed, analogous to the similar British and French institutions, a society of foreign bondholders or investors, which could exercise a certain wholesome censorship over the methods employed by corporations operating in this region. It is very much to be desired that, since small investors can hardly succeed as individual planters, they should be able to share in the benefits of this region with safety by becoming members of an honest, conservative, and well-managed plantation company. Such companies exist at present — companies managed with the honest purpose of adding to the real wealth of the country, and administered by expert agriculturalists. But lax, haphazard methods are still so common that it behooves the careful investor to avoid trusting entirely to the undoubted resources of the country, and to insist upon the employment of scientific methods in their exploitation.

PAUL S. REINSCH.

# THE PLACE OF GEOGRAPHY IN THE ELEMENTARY SCHOOLS.

THE branches of study pursued in the elementary schools are chosen for the purpose of securing two useful and reasonable ends. In the first place, they are chosen to give the child an ability to understand his environment, and to come into a mastery of it so that he can make it useful to himself. He is taught arithmetic in order that he may divide and conquer; in order that he may measure the things and forces of his environment, and learn how to adapt one set of them to control and utilize another. He is taught geography in order that he may understand the causal relations existing between his habitat, or the place in which he lives, and other places as well as other systems of things and events on the earth.

On the other hand, a second reason for adopting a branch in the course of study is that it develops some faculty or power in the child, and gives him possession of himself in that respect; for one of the primary objects is to develop the intellect, the memory, the judgment, or the heart. By the expression heart I mean the aggregate of affections and inclinations of the soul. Some discipline in school, like writing, drawing, calisthenics, or manual training, finds its place in the curriculum because of its power to develop the will, the tenacity of purpose, the ability to pay long and continuous attention to one thing, and to form habits of industry, cleanliness, regularity, and punctuality, and thus acquire those virtues which make a man a better citizen than he could possibly be without them — which make his service of more value to his fellow-men and give him the ability to get a larger share of service from them than he otherwise could.

Let any one take up the branches of the common school in the light of these purposes, and he will find that those branches, as they are in the schools, are all needed, and that it would not be possible to make any one of them a substitute for any other. But I wish to call attention to the fact that the two principles or purposes which I have named as the reasons which have determined the adoption of branches of study

in the schools not only are not antagonistic, but in many particulars agree absolutely. The cultivation of the intellect, for instance, by such studies as arithmetic, grammar, and literature, has for its result not only the unfolding of the powers of the individual within himself, but the enlargement of the individual's sphere of influence among his fellow-men, making him useful to them and making them useful to him. The boy or girl who understands arithmetic is not only cultivated or accomplished to that extent, but by so much the more useful in the family, in the industrial community, and in the nation, and by so much the more able to conquer nature for his or her own benefit, and to make useful combinations with his or her fellow-members of society throughout the world.

So, too, in the matter of literature. The literature of the English language or of any other reveals human nature in one or more of its national manifestations. Indeed, each literary work portrays some trait, or, perhaps, several traits or phases, of human nature. The student of literature comes to know the secrets of the human heart. He comes to know how feelings and emotions may become clear ideas and convictions of the intellect, and then how they become translated into deeds, habits, and established forms of living such as appear in the network of manners and customs which forms the substance of the daily life of each man, woman, and child. Literature and mathematics — literature the first and mathematics the second — form important branches of all school education. Literature is the first and most important, because, in order to adjust himself to society, one must understand the motives, desires, and views of the world which his fellow-men entertain. It is impossible for a man to live in a community where he has no insight into or knowledge of the world-view of his fellow-men, and does not know the things that make up their daily consciousness. In all nations, tribes, and peoples, the man who is entirely ignorant of the prevailing code of manners and ethics is not permitted to enjoy the freedom of civil society, and, perhaps, is not even permitted to live. One must be heedful of the fundamental requirements of society, such as the respect for life and property and the respect for the sense of decency in one's community, or else he will be restrained in person and perhaps deprived of life. It is well to remember that this is so not only in savage and half-civilized peoples, but also in the highest and most refined and in the freest and most liberty-loving communities in the world.

This is the ground on which I pronounce literature the most important of all branches of school education, whether it be in China where

Confucius and Mencius form the matter of school education, or East India where the Vedas and the great heroic poems form the staple of the course of study, or among Mohammedan nations where the Koran is learned, or in Greece where Homer's Iliad and Odyssey were the school books, or in the schools of Boston, New York, St. Louis, and San Francisco, where English literature in the school reading-books does its work in enlightening the pupil as to the modes of thinking and the motives of his fellow-men.

After literature comes geography, meaning by the term what is usually understood by it in the elementary school. After geography comes history, first, that of one's native country, secondly, that of the civilizations of the world; after history, grammar, as a special study of the forms of language. In the grammatical forms are revealed the methods of the action of the intellect; for grammar is a sort of concrete logic, revealing not only the methods of thinking, but also the methods of perception, and the methods of recollection, which form the laws of memory.

These branches, which throw so much light upon the individuality of the pupil — upon his own nature and upon the nature of the institutions as well as upon the structure of the world in which he lives — form the tools of thought and action; they are the machines, the instruments, by which he supplements his body; they are the organs by which he energizes upon the world outside of him and by which he makes with his fellows combinations useful to them and doubly useful to himself.

When an attack is made upon any one of these branches of study, it should cause us to reflect upon the individual and social necessity that has placed it in the curriculum. An attack upon geography, for instance, should cause us to consider for a moment what one's education would be if the study of geography were entirely omitted in the elementary school. Sufficient reflection upon the inconveniences which would arise in one's practical life will enable us to form a list of the points of usefulness to be found in geography. One will be able to draw up a sort of rough inventory of what the child gets from the study of geography for a few years in his early youth.

Let us for the moment make a list of the important items which the child will get from a superficial study of geography in the elementary schools under what would be admitted to be a poor quality of instruction, namely the unaided study of the text-book, the text-book being of an inadequate pattern, and the so-called teaching being confined chiefly to hearing the words of the book repeated. The pupils of average intellect will acquire some understanding of the main topics touched upon;

and they will have in memory, in a more or less digested form, some facts connected with them which will be retained throughout their lives. The constant use of certain typical facts, familiarity with which is demanded by the newspaper and magazine literature of the day, and which is more or less required by the daily gossip over national and international affairs, keeps the memory fresh in these matters. The average child will carry off with him a pretty vivid idea that the shape of the earth is round "like a ball or orange," or like the moon and the sun which he sees every day. He will also acquire the very important idea that the earth is one of the bodies which move around the sun, although he may not learn the technical term "planet." These simple ideas carry with them a correction of mere sensuous observation by an abstract and deeply scientific train of thought. One's sense-perception does not avail to convince him that the earth is round. This can be reached only by reasoning on the logical presuppositions which are implied to make the fact before him possible. But once attained, a whole system of inferences extending throughout the life of the individual, from the idea of the earth's rotundity and its revolutions, will be initiated, if nothing more is learned from geography.

In the next place, there will be acquired the ideas of latitude and longitude, which determine with mathematical exactness the location of any place with reference to base lines, like the equator or the first meridian. The pupil will certainly learn something regarding latitude and longitude, and he will learn a method, the only method by which geographical descriptions may be made accurate. No matter how superficial his study of geography may be, he will also form some approximate ideas of the latitude and longitude of many given places. He will remember, for instance, that the United States in which he lives is in North latitude, and that most of his country is in West longitude as compared with the meridian of Washington. He will learn that nearly all of Europe is in East longitude as compared with the meridian of Greenwich.

We must remember that these general superficial notions are more important than any more specific notions which follow later. It is of more importance to the individual to know that Brazil is in South latitude while we are in North latitude, than to know that the mouth of the Amazon is on the equator, and that the capital of Brazil is about twenty-three degrees South. For ordinary practical thinking the generalities of geography are exceedingly important.

Next the pupil will come to form mental images of the terri-

tories that are occupied by states and nations. First, however, he will form an idea of the contours of the several continents and of the great oceans which separate those continents. Then he will seek to learn the location on those continents of each of its several states and nations. He cannot help acquiring at the same time some historic adjuncts to his geographical knowledge. The map of Great Britain will call up in his mind much that he has heard with regard to the relations of the United States to that country. France, Spain, Italy, Germany, and Russia will each suggest certain unclassified and ill-digested items of knowledge which he has collected from hearsay or general experience regarding those countries; and it will give him pleasure to be able to reduce to consistency and order some portion of the chaotic information which he already possesses. It will be of value to him every day of his life to have some notions of the shapes, boundaries, and general positions of the States of his own country.

Besides these there is another class of geographical categories which relates to the formation and modification of the features of land and water. Even the poorest geography yet made deals with rivers, and gives information regarding their sources and their outlets, as well as their navigability and their usefulness in furnishing motive power for manufactures. It gives information regarding lakes, highlands, lowlands, and the trend of mountain chains.

Two objects on the earth especially arouse man's wonder and excite him to reflection, namely, the monster elevations of the surface of the land, which we call mountains, and the vast, seemingly unlimited, extension of the surface of the ocean. It has been the habit of geographies for two or three generations to explain the elevation of mountain chains by the molten condition of the elements in the interior of the earth. Once the elevations were supposed to be caused by volcanic agencies; but now, perhaps, the general opinion is that the gradual cooling with the consequent contraction of the earth's crust produces wrinkles on a large scale, wrinkles large enough to form the mountain systems of the Alps or of the Himalayas. No pupil of average intelligence who has studied geography in school at any time during the last sixty or seventy years has escaped forming some idea regarding the prodigious forces of nature which lift up the mountains. Nor has any one within the last fifty years or more escaped the important geological idea of the wearing down of the mountains and hills by the constant effect of rain and the escape of water carrying a load of solid matter to the sea by brooks and rivers. In other words, the average pupil has formed some idea of

the meteorological process by which water evaporates and the air, filled with moisture, is submitted to the chilling effect of high altitudes, which condenses the water again either into fogs or rain clouds, so that it comes down to the ocean again, bearing with it on its way the detritus of the rocks and soil.

This thought of the formation of elements of difference in the land surface — that is to say, the formation of the varieties of high and low, warm and cold, wet and dry, elements — and of the process by which these differences are gradually removed or eliminated is a most important idea, and is likely to be required for use by the average individual many times in the course of a year, or perhaps in a single week. This geographical fact or principle is a tool of thought, an instrument with which we scientifically understand and explain thousands and thousands of phenomena which come under observation.

Climate and the dependence upon it of the fertility of the soil cannot escape the attention of the superficial student of geography. He gets typical facts, also, in regard to heat and cold. He comes to understand the reason for the distribution of heat as found in the continually varying inclination of the surface of the earth toward the sun at different times of the year and at different latitudes. He understands also how altitude above sea-level affects the temperature. Let an explanation be given in any particular case and it is in the nature of the human mind to generalize it, if occasion offers. Occasion is constantly offering in a country where the people as a people are eye-minded and read the daily newspapers, as well as ear-minded and listen to the gossip of their fellows.

A more important series of observations is initiated by the superficial study of geography of which we are speaking. For the average pupil notes with interest the fact that there is diversity of labor over the surface of the earth; that the people of one section produce one series of agricultural or mineral products, and those of another a different series. He learns, too, that commerce can equalize these productions, taking the surplus of production from one place to the other place that needs it. He learns that the division of labor, therefore, assisted by commerce, enables each person to enjoy the productions of all his fellow-men. He learns how the raw materials produced by agriculture and mining are changed by manufactures into goods which are of far more value than the raw materials. He notes with some wonder and perhaps some incredulity the fact that commerce creates values by converting natural productions which were of no use or value where they were, into articles of very great use and value to the people of another country. The surplus vegetable

productions of most of the tropical regions are of no use or value where they are. Commerce, therefore, performs a miracle by turning *things* into *property*; carrying them from where they are worthless to where they are valuable. This is the alchemy of the social combination of man with men — the social whole — and it is exceedingly important that the child shall get into his mind quite early in his life some typical facts in regard to this matter, and that he shall apply the typical facts in explaining the phenomena of his experience.

Geography is not only a science of the formation and modification of different forms or features of land and water, but it is more especially an introduction to the elements of sociology. All the text-books of geography speak about the occupations of man, and they show more or less clearly the reasons for the diversity of human industry. Moreover, all geographies treat of certain elementary ideas of anthropology. They treat of the different races of men and of their physical and mental characteristics. It is of still greater interest that these geographical treatises describe important facts regarding the different stages of civilization — savage, barbarous, civilized, and enlightened — treat of the costumes worn, and give a few glimpses at social habits; pictorial illustrations of the architecture of the cities and villages, or of typical specimens of the vehicles for travel; facts regarding the agricultural products raised; cuts showing the appearance of plants and animals and natural curiosities, such as waterfalls, ravines, cañons, glaciers, etc.

The average child gets some notion of the government of the several countries, and makes some comparison between the freedom of individuality encouraged under one and another of the different forms of government. He loves to hear of countries which allow the citizen an opportunity for initiative just as his own country does. Each new item regarding government, style of clothing, or peculiarities of products, helps the pupil to remember the other items with which it is connected. Particularly interesting to the child are the pictures of the wild animals — the carnivorous beasts, the reptiles, and the birds — and these items especially assist his memory of the drier, but more essential, facts of geography. Even the old-fashioned geography gives items regarding the religious beliefs of the peoples of the different countries. Religion is the underlying principle of civilization. Thus we have a repertoire of the main points of sociology, namely, religious beliefs, forms of government, industrial occupations, races, costumes, and, finally, what each nation puts into the market of the world from its surplus for exchange with other peoples, and what it receives in return.

There certainly is nothing of more importance that the school gives the child — next to literature with its revelation of the feelings and thoughts of his fellows — than this matter of the division of labor and the need of each population on the face of the earth for the other populations who contribute to it certain necessaries of life. Is there anything more productive of kindly and hopeful feelings toward one's fellow-men, living under different governments and separated by vast distances, than this study, which finds each useful to the industrial whole?

II. In geography the pupil comes into contact with these substantial facts that lie outside of his daily experience and yet are necessary to him for explanation of it. Good instruction in the school will, of course, draw constantly on the daily experience of the pupil in order to explain the colossal facts which are not to be found in his neighborhood. The small things and phenomena which he sees every day about his habitat enable him to learn to understand the greater phenomena which are of historical importance. He sees, for example, every day the effect of the last rain-freshet in wearing away the soil of the road on the hillside, and it furnishes the small fact by which he interprets the large fact of the wearing away of the Niagara gorge.

It must be admitted, however, that it is a mistake to send the child to the geographical investigation of his neighborhood before he has heard anything about the great facts of the world. He should be put on the investigation of his habitat in connection with the great facts which are mentioned in the geography. One approaches the explanation of great facts through little facts, but he should learn as quickly as possible to see the latter on the background of the former; hence, they should be taught together. If this is so, it is certainly a mistake to keep pupils for many weeks, or even many days, upon the study of their neighborhoods before taking up the colossal facts which are of world-importance.

Above all I should wish to call to mind again, as the central reason for its place in the curriculum, the general value of geography in giving the pupil an insight into natural causes. In early periods of the history of mankind, and among all savage peoples that are contemporary with us, the facts of nature are explained by animism, that is to say, by the interference of evil spirits. A vast network of superstition covers the face of nature from the gaze of the savage. But the child who begins to study geography begins to find one fact behind another fact. He learns forces, and how forces make things, and how forces modify things. His knowledge constantly grows from the symbolic, which

ignores the causal nexus, over to the scientific and prosaic view which comprehends the rationale of phenomena.

A fact as regarded by the infantile mind is a small matter compared with the same fact as thought by the scientific mind; for the fact is at first a little fragment broken off from a long chain of causal action by the feeble mind of infant or savage. But experience keeps making additions to the fact before and after it. It places links of causation before it and links of effect after it, and thus it grows to be a big fact.

Now the child who can grasp only so small a piece of fact, or in other words, whose facts are so small in compass, goes by external appearance and does not see the essential nature of the fact. The child sees the gun with which his father shoots. He thinks that a stick cut out in the external resemblance of a gun will do what the gun does. The essential things about the gun are the steel tube, the powder and shot, the method of exploding the powder, etc. The child's fact contains none of these items. His fact is a symbolic fact, rather than a real fact. We see that to get at a reality we must have the chain of causality. Play undertakes to reproduce the external semblance of the fact without the causal chain that makes the essential element in it. The farmer mows with a steel scythe and cuts grass. The child mows with a wooden scythe and cuts no grass. He merely "makes believe" to cut grass.

To illustrate this process of growth from symbolic to prosaic reality, consider the chain of causality involved in thinking the familiar object bread. This illustration is used by Professor Noiré. Going backward toward the origin of bread, we have the successive steps of baking; kneading the dough; mixing the meal or flour with yeast, lard, butter, and other ingredients; the grinding of the grain and sifting of the meal; the harvesting of the grain, with all its details of cutting, binding sheaves, threshing, etc.; the earlier processes of ploughing, harrowing, sowing the grain; and its growth dependent on rain and sunshine. Each of these links in the chain has side relations to other chains of causality. For example, the yeast put into the bread connects it with hops or some other ferment or effervescent; the lard connects bread with the series of ideas involved in pork raising; the salt, with salt manufacture; the baking, with the structure of the oven and the fuel. So long as anything is not yet understood, the word expressing it is a partially blind symbol.

The retrograde series toward the origin is matched by a progressive series toward the future use of the bread. There are the preparation for

the table, the set meals, the eating and digestion, the sustenance of life, the strength acquired, the work accomplished by means of it, etc. The omission of the causal nexus characterizes symbolic thinking in the sense of that word as I employ it here. It is true that we commonly use the word "symbolic" in a more restricted sense, namely, the use of the material object to represent the invisible spiritual object.

The child begins by perceiving sense objects and mimics them in play. Gradually he discovers their chains of causality. Each object is in a chain of causality; it is derived from something else, and, when it changes, it passes on into something else. The child learns to think more and more adequately the object which he sees. He learns to add to it a larger and larger extent of the chain of causality that belongs to it.

III. Geography, as it is understood by the geographical societies, has a narrower signification than geography as introduced into the elementary school. It is used by the former to indicate primarily the production of the elements of difference on the earth's surface—differences of land, water, and climate—the differences that arise from the upheaval of land and from the erosion of land and its transference to the ocean, and also the differences that arise by the interaction of land and water, such as rivers, lakes, bays, straits, seas, and oceans. Besides the production of such elements of difference, geography includes for the scientific geographer the effects or influences that the peculiarities of the earth's surface have upon the life of man; such, for example, as relate to food and clothing, their need and their supply, and such as are calculated in the course of ages to affect his physique and produce a distinct race of men, black, yellow, red, or white. In other words, the scientific geographer, as a specialist, includes anthropology with his study of the earth-surface and of its plants and animals.

But geography in the elementary school finds it necessary to go farther and include a study of the elements of civilization in so far as they are matters that characterize localities. The geographical distribution of civilization is, in fact, of the first importance to the child, the youth and the man, and hence has come to the front in all teaching of geography, from that of the early Greeks, who taught the second book of Homer's Iliad and made the children learn the localities of the Grecian tribes, down to the latest teaching of geography, which spends most of its time on the habitats of three or four leading nations.

Geography in the elementary school, therefore, deals much with the location and growth of cities—the transformations of nature by man for his purposes. First he transforms nature for dwelling purposes, by the

building of cities, villages, and farm houses; secondly, he transforms it for the purpose of intercommunication by making roads, bridges, tunnels, viaducts, railways, and canals; and, thirdly, he transforms land by adapting it to crops, by fencing, by draining, by cultivation, by irrigation, and by connecting it with the world market by internal and foreign commerce. In other words, school geography deals not only with the geographical features in which natural conditions are seen to affect "the physical character of man," but also with the transformations which man makes upon nature with his cities, railways, canals, and agriculture.

By reason of this difference in definitions, the school geography is likely to be hindered if it adopts the literature of the geographical society without some modification. The region of the North Pole is of as much interest geographically as the region about New York, or London, or Paris, or any great centre of civilization. But the child in the school ought to be interested chiefly in the geographical centres of population. The centres that are connected with the history of great events are also, other things being equal, of more importance than the territory that has not yet been made the theatre of civilization.

The emphasis which school geography lays upon the connection of places with human history suggests an educational heresy that infects to some extent the pedagogy of this branch of study. The votaries of geography sometimes become so much interested in the physical process of action and reaction in earth, air, fire, and water, that they turn away in disgust from the transformation which man has made upon the earth's surface, and especially from that part of geography which relates to the lines and boundaries of political divisions. They get so much respect for the inanimate forces of nature that to them the rational forces of man seem arbitrary and unworthy of serious attention. This gives rise to the literature of geography for geography's sake that reminds one of those writings that are said to belong to poetry for poetry's sake.

Moreover, there is a tendency on the part even of those who have given most attention to the physical elements and forces to overrate their influence upon civilization. They seek to explain, as did Mr. Buckle, the development of the institutions of society by climate, fertility of soil, picturesque scenery, earthquakes, and such matters which are thought to have a controlling effect in determining the character of the populations of countries.

This view makes geography in some sense a substitute for history. If historic development is an effect of geographic conditions and forces, it is, of course, a mistake to consider history an evolution proceeding

through a growing sense of the ideal of freedom, and its realization in theory and practice. The great German, who said that the world-history is the progress of man into consciousness of freedom, must have been mistaken. The evolution of national ideas, beginning with Eastern Asia, where the state is everything and the individual next to nothing, moving westward to the nations of Europe and America, where the state is great in proportion to the greatness of its individuals — this progress certainly must be an illusion because it cannot be explained from geography. This *bouleversement* of ideas on the part of enthusiasts in the study of physical processes is enough to prove that geography is not a good substitute for history.

History shows the inward development of social and political ideas and their realization in institutions. The geographical conditions furnish no more than the mode of manifestation. Man reacts against nature and transforms it into an instrument of expression and a means of realizing his rational self. Geography does not deal with the evolution of human freedom, except in so far as it shows the results of that freedom in the modifications which man has made to adapt nature to his purposes. The cold freezes the water into snow, but it does not make the Eskimo's snow hut. The river divides the populations of a country, but it does not make the bridge, the ferry, and the tunnel that unite them.

Specialization in science leads to the division of aggregates of knowledge into narrow fields for closer observation. This is all right. But in the course of study for the common school it is proper and necessary that the human interest should always be kept somewhat in advance of the physical.

W. T. HARRIS.

## PROBLEMS OF OUR EDUCATIONAL SYSTEM.

EDUCATION aims to fit one for three things: (1) to earn his living by the exercise of his trained powers; (2) to support the institutions of society by intelligent appreciation of their worth; and (3) to enjoy the products of art and civilization through the cultivation of imagination and taste. The mind is not a thing apart from heart and will. Knowledge blends with will, and flows over into feeling. Its worth, therefore, is measured by what it helps a man to give to the world in the service of his calling and in social support, and what it brings back to him in personal fellowship and æsthetic satisfaction.

The first requirement that this threefold standard makes of the elementary school is that it shall preserve the children in vigorous health, untouched by needless fret and worry, and unconscious of either heads or nerves. No school can create health — a free gift of Nature — but a school can at least preserve it unimpaired. Fresh air in the school, ample playgrounds outside, tests which call for quiet work rather than feverish cram, and an atmosphere of ordered freedom are some of the helps an elementary school can give to the health of the children. The school which, by bad ventilation, crowded curriculum, vexatious examinations, or anxiety about details of rank, breaks down health is guilty of the greatest crime it is possible to commit against a child.

Secondly, this standard calls for power of hand and eye, to appreciate and make beautiful and useful objects. Kindergarten methods employed until the age of six or seven, followed by drawing and manual training, give to the future artisan a discipline which will increase the efficiency of his work, and to those who enter other callings a lifelong respect for the dignity of manual labor.

The English taught in the elementary schools should impart not only mechanical ability to read, but the habit of reading, the love of good books, the power to entertain small groups of friends by oral reading, and the gift of writing an interesting letter or account of one's experience. The same principle which leads us to make more of English than formerly leads us to make much less of arithmetic. How much

arithmetic will help one to be a useful workman, a reliable citizen, a happy human being? This is the question which determines its place in the modern curriculum. The answer is obvious. Facility and accuracy in the four fundamental operations with integers, vulgar and decimal fractions, proportion, percentage, interest, discount, compound quantities, and concrete mensuration — beyond these things it is a waste of time to go. The time saved at this point may be given to elementary algebra and concrete geometry. Geography likewise helps the workman, the citizen, and the man, when it is based on the observation and interpretation of natural and political features, and leads the mind to feel at home in the world of which it is a part.

History serves us best when it begins with myths and biographies, and then passes to narratives of the way nations grew, institutions were built up, and liberties were won. As a backbone for the story, a minimum of never-to-be-forgotten names, facts, and dates must be learned by heart. As its life-blood, the pupil may well commit to memory passages of great literary power, setting forth significant men and events. Within this accurately marked enclosure memory should reign supreme and absolute; beyond this well-defined area mere memory should hold an incidental and subordinate place. The power to tell a connected story of significant movements and events, to picture characteristic scenes, to estimate the worth and services of leading men, to trace the sequence of cause and effect, to see the relation of each part to the whole — this should be the chief aim of the recitation and the principal matter for examination. History thus taught serves our threefold purpose; but it is hard to see how one could do a better piece of work, or cast a wiser vote, or lead a happier life in consequence of having had a lot of disconnected kings, battles, dates, and statistics once imprinted on his memory.

Science in the elementary school should be primarily training in observation, with reasoning based on facts observed. This, too, serves our threefold purpose; making the workman more observant, giving the different classes of society more common subjects to talk about, and incidentally laying the foundation of truthful character. People whose training has been chiefly or exclusively in books, whether literary, metaphysical, or even theological, can hardly help being liars if they try; for they have not been trained to discern the sharp difference between things as they would like to have them and things as they actually are, to "draw the thing as he sees it, for the God of things as they are."

The injection of dogmatic scientific instruction into the public schools for moral or other purposes is a device of doubtful moral efficiency, and injurious to the true scientific spirit. In the elementary school promotion should be frequent, and bright scholars should be advised and systematically helped to shorten the time spent in the lower grades. Time saved elsewhere may be utilized for a beginning in algebra or geometry and a modern language. Examination in the elementary schools should be a test of power rather than of mere acquisition. There are a few things, such as rules in grammar, tables in arithmetic, arbitrary facts in spelling, a limited number of dates and events in history, certain immutable facts in geography, and, above all, carefully selected passages from good literature, which should be learned by heart, and may be properly called for on an examination paper. But the chief stress in the examination should be laid on what the pupil can do, rather than on what he can remember. We know a great deal more than we consciously remember.

For instance, while engaged in writing this article on the typewriter, I did not miss in a single instance a letter I wished to strike; but if you should ask me now where k, f, n, or v is on the key-board, which I have been using for the past ten years, for the life of me I could not tell you. My fingers know unerringly — that is enough. Must I be conditioned in typewriting because my memory cannot answer the formal question off-hand? Is not the power to write the real test? The examination which calls for a lot of unrelated facts, chosen at random out of all that has been taught in the term, to be dumped out of the memory, leads to hasty, feverish cram. Examinations which test power to do quiet work will diminish by one-half the fret and strain, and will more than double the peace and joy of the more sensitive and nervous children in our public schools.

Discipline in these schools should be ethical, resting on freedom rather than force, and proceeding on the assumption, not always justified, to be sure, that the child means on the whole to do right. The one rule of the school should be: "No one shall do anything that interferes with anybody else." The children should be shown that quiet, order, and the like are essential conditions of carrying on the work for which each scholar comes to school; and that noise, needless communication, and the like, are interferences with others, and therefore sins against the interest of the school rather than against the arbitrary will of the teacher. The teacher should know the parents and children in their homes. It takes time to make thirty or forty calls; but if one really aims at a dis-

cipline which is personal and ethical rather than arbitrary and formal, he will find that he has ten times the influence in this direction if he knows the whole boy at home with his parents instead of that small part of himself which he brings to the school.

This brings us to the crucial question of the elementary schools, the problem of the teacher. The new ideal of the elementary school is recognized to-day. The reforms I have indicated above are already well under way. Yet these reforms do not of themselves insure a good school. Indeed, a good course with a poor teacher may be worse than a poor course with a poor teacher to match. Anybody, I had almost said any fool, who could keep six months ahead of the class could teach the old curriculum in the old way. Vital teaching of vital subjects involves knowledge and maturity far in advance of the pupil, as well as the ability to stimulate and answer all sorts of questions. Can such teachers be found?

The disposition of graduates of our colleges and best normal schools to accept positions in the elementary schools shows that the new teacher is coming to match the new courses of study. Let no one fear that in such work her highest education will be thrown away. There is nothing in the way of either learning or character gained by the Smith or Wellesley alumnæ from their college course which cannot be made available in substance for the teaching of the enriched curriculum of our elementary schools. If the graduate cannot put the breadth of view and clearness of insight gained by her college course into teaching children of eight or ten, the reason is not that she has learned so much, but that she loves children so little. All the true teacher is and knows comes out in the lucidity of each lesson her learning illuminates and her logic clarifies. Happy the children who begin their education under the inspiration of one who lures them over the rough beginnings by incentives drawn from her own large acquaintance with the richer fields beyond!

Even as it is to-day, the public elementary school is vastly better than the elongated private kindergarten which caters to the flabby-willed, over-indulged, under-worked children of the exclusive rich. The public school with the new teacher and the new curriculum can be made good enough for anybody's child. That is the place where every American boy and girl ought to learn the great lessons of hard work, popular sympathy, and intellectual pleasure.

In speaking of the elementary school I have dwelt chiefly on subjects of study and methods of teaching. The problem of the public

high school is more a problem of organization. The curriculum is no longer a sudden break from that of the elementary school; but now that history, literature, science, algebra, and a foreign language are recognized features of the best elementary schools, the high school is a thorough, intensive, and scientific pursuit of the subjects which in a more general, descriptive, and conversational way have been begun in the elementary schools. Whatever the practice of high schools, there is coming to be an agreement in theory of how these subjects should be taught at this stage — literature by the study of masterpieces themselves, instead of a text-book containing biographies of authors and catalogues of their works; history by references to many books and written reports thereon, instead of the recitation of the words of a single authority; science by the laboratory, instead of the "fourteen weeks" text-book alone; language with a view to power to use it, instead of a specified amount of performance.

The organization of the high school for our three great ends demands, first, that the classical, the commercial, and the industrial high schools shall not be separated, as has been done in some cases. Separation brings a slight gain for each institution in its chosen line of work; but it purchases this gain at the fearful cost of the premature separation of different classes of pupils before their tastes have been discovered and the range of their powers has been tested, thus defeating the highest end. It introduces and perpetuates lines of social cleavage, natural enough in the German Empire, but utterly inconsistent with the genius of the American Republic, and thereby misses the great social end of unification, which the public school should promote. The setting apart of classical culture as a thing by itself deprives the workers and the business men of their share in its refining influence. It then becomes, for those who get it, pedantic and unduly exclusive of competing modern interests.

Neither is the division of the high-school curriculum into mutually exclusive courses within the same school the best form of organization. This involves premature finality in choice; placing the child in the hands of an iron fate before he has developed the interests which should become the charter of his freedom. For these unfortunate developments in high-school organization the colleges have been chiefly responsible. Their narrow range of requirements has marked out the narrow traditional preparatory course; and since this course has been the only one subjected to a severe test, it has tended to monopolize the best talent and energy of the teaching force. Had the high schools continued to yield to the arbitrary domination of the traditional college requirements, it is probable

that a wave of popular opposition would have risen against them, threatening their efficiency, and in many cases wiping them out.

The best organization of the high school is in a single course, of which a certain number of subjects, like English and algebra, are required; while others are open to choice under limitations, as for instance when one foreign language is prescribed, but the choice of it is left to the scholar; and some, like physics, European history, and solid geometry, are open to unrestricted choice. As an example of such organization I shall cite the high school at Portland, Maine. A study pursued five times a week for a year counts two points, subject to slight variations due to subject matter and methods of treatment. The student may take as many courses as he pleases each year, subject to the arrangement of the time-table. In order to graduate he must complete studies amounting to twenty-six points, gaining a rank of seventy in each study, and an average of seventy-five in all.

In this way the student may complete the course in four, five, or six years, according to natural ability, health, strength, and freedom from domestic or other responsibilities. The completion of the course is merely incidental to the doing of the work, instead of the work being incidental to the completion of the course. This is a great relief from over-pressure, especially upon girls at a critical stage of their development; and it adds to each subject a sense of reality and importance which it did not always have when viewed as a prescribed part of a fixed course. It affords discipline in choice, thus preparing the way for the responsibilities of freedom, whether in college or in the world outside; yet it exercises sufficient guidance to restrain caprice and avoid scrappy and unrelated courses. Anything that is taken at all must be pursued with reasonable consecutiveness and concentration, in most cases for a full year five times a week. English and Latin are offered for four consecutive years, Greek, French, German, and mathematics for three years, five times a week. Other subjects are taught for one or two years. Such a course holds all the high-school scholars of the city together in certain fundamental subjects, and keeps in helpful contact those whose courses ultimately diverge. It gives the boy who is going into industry or commerce daily association with the boy who is to be a lawyer or teacher; and it helps both to understand each other ever after.

Until recently the worst enemy of the high schools has been the narrow and arbitrary requirement of the colleges. As long as the brightest scholars were given the best teachers, under the stimulus of an outside examination, on condition that they took Latin, Greek, and mathematics,

to the exclusion of almost everything else, the high school was an institution supported by the many for the benefit of the few. A twenty-six-point course in the high school logically implies a twenty-six-point requirement for college, into which, under certain limitations, any of the twenty-six points offered by the school may be counted for entrance to college. The limitations are that the course should have a backbone of consecutive and thorough mastery of the elements of mathematics, English, and a foreign language, preferably Latin. Provided the student has taken a course which has such a backbone, great variety of feature and form should be accepted in the remainder of the high-school course. Let the high schools stoutly assert their independence, let them give their pupils the best individual development and the best preparation they can for actual life, and the colleges will be compelled to admit their successful graduates as candidates for the most honorable college degree. The colleges are moving rapidly in that direction. Elementary Greek is already taught in many colleges to those who enter on science or modern languages instead of it. Let the high schools serve the public interest in their own way, resolutely and yet thoroughly, and the colleges will come to terms.

While it is thus the policy and the duty of the colleges to broaden their basis of admission and connect with the high school throughout its entire range, it is also their duty to insist by examination on thoroughness in the work of the high school, and to set the standard of efficiency for them. This duty was never more urgent than it is to-day. As long as Latin, Greek, and mathematics were the requirements for admission — subjects clear and definite in nature, and with methods of teaching and standards of efficiency established by generations of tradition — examination was less essential. Now that we are to accept science, history, and modern languages — subjects far more vague, with methods of teaching still in the experimental stage, and with standards of attainment still undeveloped — and that the increasing distraction of athletics and premature social responsibilities makes the temptation of the high-school pupil to neglect the latter part of his course vastly greater than that of the academy student of a generation or two ago, the maintenance of an examination for admission to college is far more imperative than ever.

The certificate system, when administered as loosely as it has been of late in New England, is demoralizing to schools and disastrous to colleges in every respect, except as it affects the size of the freshman class. A professor in one of the largest of the colleges which receive students on certificate remarked last year that the work and examinations of the

first term showed that of the freshmen admitted to that college, one quarter were excellently prepared, one quarter fairly prepared, one quarter poorly prepared, and one quarter entirely unprepared. One of these colleges was compelled to send away thirty-eight freshmen at the end of the first term on grounds of insufficient preparation. How much better for the school, the college, and the students themselves, either that the certificate should be based on thorough and systematic inspection of the school, or else that the candidates should have an outside examination, uniform, impartial, fair; so that the students who are not fitted should be saved the expense and disgrace of going to a place for which they are unfit; and that those who are well prepared should be saved the waste of their time involved in having to drag along through the first year, and in many cases through the whole course, fellow-students whom a careful inspection of schools or a fair examination at entrance would have kept out of a place where they do not belong. A college loses nothing in the end by adhering rigidly to reasonable requirements. The student who has to work to enter a college appreciates it all the more when he gets there, and is much more amenable to intellectual and moral influences than one who feels that the college is so anxious to receive him that it is ready to waive the formalities of thorough preparation.

The complaint is often made that the high schools use a large proportion of the public-school fund for a very small proportion of students. Because only from five to eight per cent of the school population are in the high school, it is argued that its support is misuse of public funds. But, in the first place, the public high schools cost less than one-fifth of the total cost of the public schools. In the second place, the actual enrolment in the high school at any given time, which is about eight per cent of the total enrolment in the public schools, is no fair measure of the percentage of those who enjoy its privileges. It would be as logical to estimate the proportion of people who are benefited by a railroad as that proportion of the total population who are found riding on it at any one given time.

If all the children who lived long enough should happen to go straight through the whole thirteen years of the public-school course, we should have only about four-thirteenths of them in the high school at any one time. Hence, as Secretary Hill has pointed out so clearly, eight per cent of enrolment means twenty-five per cent of enjoyment. And just as the people who never ride on the railroad at all share the benefits which it brings to the industry, commerce, and valuation of their town, so the seventy-five per cent or more of the children who never enjoy

the direct benefits of the high school get countless indirect benefits — in the improved quality of teaching in the elementary schools, in the higher efficiency of business enterprises, in the better conduct of public affairs, and in the higher tone of intellectual and social life which result from the presence of high-school graduates as teachers, captains of industry, public officers, and social leaders in the community. A school which keeps open individual opportunity for everyone, and confers indirect benefits on all, is not to be measured by percentages of expenditure, on the one hand, or of enrolment, on the other. Fortunately, thanks to the general intelligence which it has done so much to diffuse, the perpetual maintenance and generous support of the high school are already assured. Some States make a high-school education free to every child in the State, whether his own town furnishes it or not, by town and State payment of tuition in some high school or academy in the vicinity.

At this point, as in the case of elementary education, we must ask the harder question: Is the public high school, good and popularly necessary as it undoubtedly is, the best thing in secondary education?

For certain rather narrow social and preparatory purposes it is not always quite so good as the best private day schools in the cities. For youth of unusual maturity of character and purpose, and for youth unfortunate in their home surroundings, the public high schools are not quite so good as the best endowed academies. They are infinitely better, both morally and mentally, than the average private boarding school, without endowment, run as a means of making money. It is the almost unanimous testimony of young college graduates who have served an apprenticeship as teachers in these boarding schools that they are the last places on earth to which they would send their own children. After all, home, with the constant companionship of father and mother, brothers and sisters, the responsibilities of chores and errands and incidental services, the support of the institutions and expectations of society, and the background of the woods, fields, and streams, the buildings, streets, and parks of one's birthplace, is quite as good a place for the growth of solid, generous, virtuous character as the school to which at least half the pupils are sent because their parents are too busy to bother with them, where artificial interests crowd out natural interests, and perpetual excitement forbids quiet reflection, where the crowd obliterates individuality, and from which the visit home in vacation is an occasion when the home is turned upside down for the visitor's entertainment in an unceasing round of gayeties. The high school makes

possible the combination of education at this critical stage with the influences, the duties, and the dear delights of normal home life.

When emancipated from traditional college domination in its course of study, inspired by college expectations as to the quality of work efficiently enforced, generously adapted to the real needs of its pupils, in view of physical health and prospective vocation, surrounded by helpful home influence, and liberally supported by taxpayers who insist that the best teachers to be had are none too good for the most susceptible and critical years of their children, the high schools are destined to do for the many what the old New England academies did for the few in making America the land of intelligent workmen, loyal citizens, and happy people.

The problem of the elementary schools we have found to be one of subjects and methods of teaching. The problem of the secondary school is one of organization, and emancipation from the traditions set by the colleges. The problem of the colleges and universities is one of spirit and aim.

The logic which supports the public elementary and secondary school demands the State university as its completion and crown. In pioneer conditions, as in Colonial New England and the new West to-day, the State is the only agency able to afford adequate financial support to higher education. We in the East must not forget the time when Harvard University was glad enough to accept from the civil authorities the proceeds of the Charlestown ferry. Where it is a question between feeble denominational institutions and well-equipped State institutions, the latter are infinitely superior. The intrusion of politics into the direct management of the institution is a danger which the stronger institutions have managed to avoid; and the lack of definite religious influence within the university can be fairly well met by voluntary associations of professors and students, and better still by the establishment, in close proximity to the university, of religious halls or houses, in which the students may find a spiritual home. These State institutions have done inestimable service in the building up of the West. By their close connection with the public-school system, by the comparative inexpensiveness of the education they offer, and by the inexhaustible financial resources which they are able to command, they are bound to be factors of increasing power in the higher education of the country.

Are they the best type of universities? Did Harvard and Yale make a mistake in cutting comparatively loose from State control? Would New England be better off if its students were in Universities of Massa-

chusetts and New Hampshire, instead of in Dartmouth and Williams, or Smith and Wellesley? Have the University of Chicago, Colorado College, and Leland Stanford, Jr., University a future as great as, or even greater than, the Universities of Illinois, Colorado, and California?

In answer to these questions I shall have to run the risk of misunderstanding by saying that the higher education, as well as the lower, may be democratic, but that the highest education must be aristocratic. The best things experts only can fully appreciate. The fine distinction between the best and the fairly good is nowhere more important than in higher education. Those distinctions are not very clearly felt at present in either State or endowed institutions. They are more likely to be felt, however, in a private than in a State institution.

Now, we have a few really excellent State institutions, like those of Michigan, Wisconsin, Minnesota, and California. But these institutions are the creations of men of genius, who have managed to embody their own ideas and induce the State to pay the bills. In Wisconsin we have one very strong department, that of history, which ranks with the best in the country. But the fortunate possession of a great historical library and of a historian as president accounts for that fact. Twenty years ago a reference to the example of Germany would have sufficed to settle the superiority of State universities. The twentieth century, however, finds us just a bit tired of the German's peculiar type of scholarship, with its zeal to heap up new acquisitions of knowledge regardless of relative worth, sense of proportion, attractiveness of form, or either æsthetic or practical use. The degree and the thesis are no longer accepted as sure indications that a man is prepared to teach American youth. It is just beginning to dawn upon us that a grain of inspiration is worth many ounces of information; that an ounce of comprehension is worth many pounds of aggregation; and that a single pound of art is worth many tons of science. Hence, knowledge is but one of a dozen of the ends of education, one of a score of the qualities the university teacher must have.

What, then, are the ends of college education? To a request the other day from a popular journal for an answer to the question, "Does a College Education Pay?" I gave the following answer: "To be at home in all lands and all ages; to count Nature a familiar acquaintance, and art an intimate friend; to gain a standard for the appreciation of other men's work and the criticism of one's own; to carry the keys of the world's library in one's pocket, and feel its resources behind one in whatever task he undertakes; to make hosts of friends among the men of one's own age who are to be leaders in all walks of life; to lose one's self in

generous enthusiasms and coöperate with others for common ends; to learn manners from students who are gentlemen, and form character under professors who are Christians — these are the returns of a college for the best four years of one's life."

And who are the teachers who can give such an education as this? Not merely your German or German-American doctor who has compassed sea and land with the zeal of a Pharisee for a proselyte, or a Colonial Dame for a pedigree, to add some new fact, it matters not how trivial or insignificant, to the mass of human knowledge. Knowledge and technical skill, the disposition to keep step with progress, and the courage to make little excursions on his own account into the unknown, the professor must not, indeed, be without; and if the doctor's degree, or an appropriate hood, serves to mark this capacity, all the better. On these points evidence is easily secured. But then begins the real sifting of the candidates. Was he a leader among his fellows in college; or has he since acquired sufficient appreciative sympathy with undergraduates to know how to lead them now? Is he a man of force sufficient to have given him influence and power as an editor, a lawyer, a banker, or a railroad manager, if he had chosen those walks of life? Is he genial, so that, if he were not a professor, young fellows would be likely to spend occasional evenings with him at the club or in his home? Has he such a character that whoever meets him is stronger and purer for the contact? Has he keenness and humor so that he can see through men's motives as if they were glass, and not let them pull the wool over his eyes? Has he tact to get what he wants done without arraying against himself that instinct of freedom which is the strongest and the noblest impulse of youth? Does he live in his subject, so that the meaning and worth of it overflow into whatever he says and does? Is the begetting of a kindred enthusiasm for his subject in intelligent pupils the keenest delight of his life? Has he the sense of proportion which enables him to drop all this technical interest when he goes out into the world, and to be a man among men? Has he perfect health, and the cheerful temper which goes with physical vigor? Can he live on his salary without being harassed and degraded by debt? Does he stand well with the authorities in his own department, and will he ever do anything to build up the reputation and influence of the institution he serves?

These are a few of the many, almost mutually exclusive, qualities the college professor ought to have. Do you wonder that those of us who have to select men for such positions find that, as President Tucker once remarked to me, out of any fifty well-recommended and apparently

well-qualified candidates for a chair there are never more than two or three that merit serious consideration?

All institutions, State and endowed alike, are at present in the democratic stage of development. We are all poor, and, in the scramble to expand, which the universal adoption of the elective system has forced upon us all, there is comparatively little difference in the quality of work done in the endowed and the State institution. The chance of rising above this democratic level to a real aristocracy of personality and privilege is greater in the endowed than in the State university.

The greatest teachers must have rather more than a living salary; and great salaries are more likely to be paid by endowed than by State institutions. Great teachers must be left in large measure free to determine the distribution of their time and the methods of their work. State institutions are likely to tie them down with more of the red tape of uniform methods, hours, and quantitative results than can be found in institutions under more liberal management.

The besetting sin of the higher education is its inevitable tendency to resort to devices which get something out of everybody, instead of putting the best things into the few who are able to receive them. It is infinitely easier to get grammatical and philological results out of everybody, than to impart literary taste and appreciation to anybody. Hence the monstrous perversion of classical study which has made the literature of those marvellous peoples almost as dead as the languages in which they are written. An instructor who recently came to Bowdoin to take little groups of students and try to show them in terms of the customs and institutions of their time, and the literature and life of our own, what Homer and Horace really meant, came around almost discouraged, after a day in the library getting his notes and references together, and said, "I couldn't help thinking how infinitely simpler and easier it would be to set those fellows lessons in Greek and Latin prose composition." In the long run the State institution will be rather more likely to do the easier, simpler, less expensive, and less valuable thing. In dealing with large masses of men it is so tempting to substitute mechanical dexterity in manipulation for the grasp of the significance of things, in science; grammar and philology for insight and appreciation, in literature; transcription for illumination, in history; the criticism of other men's opinions for the examination of one's own, in philosophy, that the best teaching is sure to be rare in any institution. The need, however, is likely to be soonest felt, and most generously met, in institutions which have in their organization and

administration least of democratic uniformity and most of the aristocracy of educational experts.

With all our enormous expenditure on higher education, we can never make a creative genius of one into whom God had not breathed the breath of life before he came to college. We can, however, provide a type of teachers, and a method of teaching, which shall help to discover talent where it is latent, and at least not stifle its development and expression. The elective system is a great step in that direction, the longest step mere organization can take. That is a step State and endowed institutions can take with equal pace. Other steps are equally important: teachers selected on a dozen, instead of one or two, considerations, supported generously, left comparatively free to accomplish results in their own way, and esteemed for the quality of their influence even more than for the quantity of their performance; concentration in single institutions of departments strong out of all proportion to the strength of other departments, so that students will select their institution for the department and the men they want to study under, instead of for its general name and fame; courses of study which reward special excellence by closer intimacy with the greatest teachers, and win the best men who are now drifting into law for the noble cause of creative and constructive scholarship. These steps are essential to the highest educational achievement; and they are more likely to be taken by endowed than by State universities.

These great endowed universities and colleges, though not called State institutions by name, are in reality vital parts of the public-school system. They were founded under State charters, fostered in early days by State aid, and by exemption from taxation continue to owe a third or more of the income from their productive funds to State support. The fact that in our older States we have learned to value permanent and exclusive expert control above partial and temporary official interference does not render institutions like Harvard and Yale less public in their character, but rather makes them the more noble and fitting crown of the entire public-school system.

In this dry and dreary discussion of details, I have tried to indicate the more important points on which this system must be judged. What the elements of failure and what the elements of triumph are, I have endeavored to make clear. In conclusion, it may be well to group these elements together into two contrasted pictures.

A system which sets children formal tasks before they have developed substantial interests; which treats them all as units in a mass to be put

through the same course in the same time, in the same way; which stretches a few formal subjects, taught exclusively from single text-books, over the whole elementary period; which makes the recitation chiefly an affair of memory, and the examination simply a larger recitation with more flurry and worry; which switches students on to one track or another for life before they have discovered their natural destination; which makes the cast-iron course the main thing, and subjects and children alike incidental thereto; which is subjected to no rigid requirements from above, but is content to accept whatever product is left over from athletic and social distractions; which selects teachers wholly on technical grounds, and measures their worth by quantitative standards only; which counts language synonymous with letters, acquisition the equivalent of insight, and science a satisfactory substitute for art; which drives the boys from the dulness of the elementary-school routine into premature work, the secondary-school scholars into offices to relieve the monotony of the course into which they have drifted, and the brightest college graduates into law or business as a welcome escape from the wholesale murder of literature in the name of philology of which they have long since grown weary — that system in each and every part is a dismal failure, which it is our duty to expose, condemn, and redeem.

On the other hand, a system which reveals to the kindergarten child the beauty and joy of the world's treasure-house before it puts the cold, iron keys in his hand; which, when it must train him to acquire and handle these keys, still lets him use them to unlock the myths, legends, and stories of man's great visions and deeds, the marvels and mysteries of rock and soil, plant and animal, sea and star; which is ever on the watch for the bent of each individual mind, and eager to give it free play; which, nevertheless, rigidly requires the task freely chosen to be done as the individual's best, and to be measured by absolute standards; which secures strong men and highly trained women as teachers, and brings them close to all students, and intimately near to the chosen few who are able to appreciate them; which goes behind the forms of words to the meaning of great works of art, and grasps details in their larger signification; and which wins to the lifelong service of pure truth, beauty, and goodness the choice youth in each undergraduate class — that system is a magnificent triumph, a triumph the first fruits of which we even now can enjoy, for the sake of which we are all called to labor, and the assurance of which is the best heritage we can hope to hand down to our children.

WILLIAM DEWITT HYDE.

## THE AMERICANIZATION OF ENGLAND.

A DECADE ago much concern was displayed by numerous worthy persons in this country over what was then designated Anglomania. The complaint, however, together with its cause, has largely disappeared. The force of British example as affecting American manners and customs is far less noticeable than it was even half a dozen years since; but Britons are becoming exercised over a manifestation among themselves which might be designated Yankomania. The Yankees, as our British cousins like to call us, have turned the tables completely, and are to-day exerting a greater influence on English life than ever the English did on American ideals and habits.

Throughout Great Britain one hears "the American question" discussed as a topic of never-ending interest. Sometimes it is referred to as "the American invasion." But whatever the terms employed, the essential fact, and one that is every day more and more widely recognized, is that the United States is coming to exert the most profound influence on the commercial, social, and political life of the mother country. In a word, Great Britain is becoming Americanized.

This movement, which is becoming so widespread in its effects, had its inception about five years ago, and has had its principal growth within the last three years, *i.e.*, since the beginning of the Spanish-American war. It began as a trade invasion which rapidly grew into a trade conquest, until to-day the youngest manufacturing nation of the world in many lines of production dominates the markets of the oldest and strongest of all commercial powers. The transformation has been so surprising, such a sudden reversal of the state of affairs hitherto prevailing, that on neither side of the Atlantic is its extent fully appreciated.

The newspaper-reading public of the United States has been informed from time to time within the last three years of the sales of American locomotives to British railways and of the awarding of contracts for electrical construction work to American firms. These commercial successes are merely straws which indicate how strongly the trade wind sets across the Atlantic from west to east at the present time. Of the great ma-

jority of incidents that go to make up the sum total of our industrial successes abroad, the record is known to those only who study the Government trade reports.

One consequence of our inroads upon the British market, however, is that thousands of Americans, representing hundreds of lines of commercial production, are doing a thriving business in London and the other principal cities of John Bull's domain. When one adds to these the thousands — some two hundred thousand altogether — who yearly throng across the Atlantic on pleasure quests, and fill the London hotels to overflowing, it is not surprising that the inevitable contact between the two nationalities is resulting in the acquirement by the Englishman of some of the characteristics of his Yankee cousin.

Nevertheless, the extent to which this process has advanced, as it reveals itself to observation in every part of Great Britain, is surprising. The reversal of opinion has been so sudden that it has carried the British public to much greater lengths than it would have done had it proceeded more slowly. After holding for generations to the belief that no mechanical good could come from America, the solid British householder is insistent in his demand for American machine-made products. After regarding for years with contemptuous tolerance, not unmixed with dislike, the manifestations of American character as revealed by the ubiquitous tourist, he has discovered that Jonathan is a thoroughly likable fellow after all, and that the oddities of conduct in which he occasionally indulges are due in great measure to his peculiar ideas of humor, which are very difficult to understand. Moreover, he has found that some of the devices originated in America for the purpose of promoting the comfort and convenience of life are well worth looking into, and in many cases even worth adopting. Thus, by letting down the barriers of frigid indifference which have hitherto kept him from being influenced by any of the many peoples with whom he has been brought in touch, the Briton has laid himself open to the moulding influence of his kinsman across seas. And while the batch of British dough will stand a considerable amount of leaven, there is no doubt that it is being materially modified by this all-pervading American influence.

The change in the attitude of Englishmen as a whole toward Americans is well portrayed by the familiar lines from Pope's "Essay on Man." From hatred, or at least hearty dislike, they have passed through the stages of endurance and pity, and are quite ready to embrace their cousin from the States.

To convince himself of this, the American has only to drive from the

Bank to Piccadilly Circus through the Strand and Pall Mall atop a London 'bus. He will view "American" tailor shops, "American" tobacconists, "American" shoe stores, "American" bars and restaurants by the score, and even "American" patent medicines and soda-fountains. In many places he will find a more specific welcome extended to him in the signs before the shops, such as "Outfitters to American tourists" and "American patronage solicited." If he looks through a newspaper he will not only observe the effect that American typesetting and stereotyping machinery have exerted on its appearance, but he will find also that a great deal of American news in addition to accounts of lynchings, swindles, and atrocious crimes — formerly the only trans-Atlantic events chronicled by the London prints — is being published. In the restaurants he will find American dishes; on the book-stalls he will see American books; and everywhere he will hear characteristic American expressions.

Now if all this were done merely to please their Yankee visitors or to catch Yankee dollars it might be regarded as a polite or a crafty manifestation on the part of the British. It becomes significant when one reflects that it is intended to appeal not only to the transient visitor but also to the permanent native. One does not find many citizens of the Republic in the shops that vaunt their new-found Americanism and advertise American wares so prominently. One may find plenty of Britons there, however; and the shopkeepers themselves testify that they have been able to find no more effective advertisement to appeal to their British customers than that afforded by American goods. Having tasted the fruit that he had been warned was evil, and having found it pleasing, the English consumer, apparently, is eager for more. So much is this the case that, in instances where they know that their deception is not likely to be detected, dealers do not hesitate to pass off as of American make goods that were actually turned out within sight of St. Paul's.

Some amusing incidents have occurred of this preference for American manufactures. Sewing machines of American patent are in use all over the United Kingdom, and every large company has its representatives in the different cities. In order to supply the British trade more readily, and also, as they thought, to score a point in their favor by appealing to British national pride, the representatives of one of the companies erected shops in Scotland and made arrangements to produce machines on a large scale with British workmen and under a British name. To their surprise, however, they found that prospective buyers

declined to accept these machines. The buyers insisted on having those imported directly from America, declaring that the latter were better and more durable than those made from the same designs by similar machinery, but turned out by British workmen. That this was prejudice may be admitted; but it was a prejudice in favor of America, not against her.

But it is not only in the realm of the shopkeeper that Americans have become popular. They have been taken up with equal or even greater enthusiasm by the highest ranks of society. There is no doubt that their popularity has been due in great measure to the influence of those American women who have married into the ranks of the clever, titled, or wealthy, who form the most important elements of British high society. The grace, the brightness, and the adaptability of these women have made them immensely popular; and the British, having found them fair types of their countrywomen and countrymen, have extended an equally cordial welcome to the latter. At every house-party held in England last summer, at every London dinner, and on every yachting expedition, Americans were much in evidence.

There have been many signs, also, to show American influence on English social customs. For one thing it may be seen in the decay, or, one may say more properly, perhaps, the relaxation, of the stiff-necked chaperon system. Until quite recently, it was unusual to find in England a formal gathering at which fashionable young women were allowed to attend unaccompanied by chaperons. During the last season, however, there were many such affairs organized by fashionable young people, and under the direction of a single young matron, as is very generally the custom in this country. There is a very noticeable tendency in England to allow young people much more freedom of social intercourse than formerly. It cannot be said, either, that the change is at all unpopular with the young people themselves, or that it seems likely to have any other effect than to develop in the English girl the self-reliance that is so prominent a characteristic of her American cousin, and to make young men and women understand each other better than under the older and more formal system.

Another effect of American example is to be found in the growing popularity of hotel and restaurant life abroad. Until the American "invasion," it was almost an unheard of thing for a family to take dinner in a public restaurant when their own house was available for the purpose; and as for entertaining friends in such a place, that was looked upon as altogether too *outré* to be attempted. Now, however, all this

is changed, and it is not unusual for a London host and hostess to call upon the resources of a fashionable hotel or restaurant in giving entertainments beyond the limits of ordinary house accommodation. A significant sign of the trend in this direction is to be found in the rapid multiplication of fine hotels that is going on in London at the present time. These hotels themselves, by the way, are becoming rapidly Americanized. American methods of organization and management, American dishes, and American drinks are coming more and more into vogue; and it is easy enough to find half a dozen hotels in London which are in all essential respects exactly like those of New York.

In politics, too, the English have taken lessons from the American book. It is safe to say that the predominating influence in international diplomacy during the last two years has been American. It was first displayed in a manner to compel attention at the Hague Conference. Since then, the prominence of the United States in the Chinese negotiations and the occasion for extended diplomatic intercourse between Britain and America have led to a closer study of Yankee political methods and policies. There is to-day among the leaders of the dominant British political party a well-defined group which might very properly be designated as "the American school" of English politicians. Mr. Joseph Chamberlain is the most prominent member of this group; and a close study of Mr. Chamberlain's articles of political faith reveals an unmistakable American influence which can hardly be unconscious on the part of the great Unionist. It is far more probably deliberate. As to the effect of the Americanizing process upon the popular attitude toward political questions, there are indications that even that great foundation-stone of the British political structure — the free-trade dogma — is beginning to crumble under the contact of tariff-entrenched America. It is in external rather than internal policies, however, that the two nations are likely to approximate to a common position; and in this process Great Britain is likely to come more than half way.

There is a field in which American influence is more marked, perhaps, than in any of those that have been already mentioned, and that is the domain of education. In the study of the classics and the liberal arts England, of course, has nothing to learn from America; but in technical and commercial instruction she is gaining valuable lessons from this side of the water. It is significant of the opinion in which the work of some of our great technical and scientific schools has come to be held, that on the foundation of the new Birmingham University a committee was sent over to the United States to study the methods of instruction

in vogue here, and to gain ideas for incorporation in the new institution. Even more recently a number of British educational authorities have begun an investigation of American methods of instruction in commercial branches with a view to including similar courses in the institutions under their charge.

The whole idea of technical and commercial education in Great Britain may, perhaps, be ascribed to American influence. Until the force of American competition began to be felt very decidedly, and the successes of American trained engineers and commercial men in every part of the United Kingdom pointed a moral too obvious to be disregarded, there was little demand and less provision for such practical training as the leading American universities have been engaged in giving for many years past. At the time when the Birmingham University was projected, it was openly announced that the chief object sought in its foundation was to afford British young men an opportunity to acquire the kind of training that is imparted in this country by such institutions as the Sibley College of Engineering at Cornell. Englishmen are coming around to the American view which regards the various technical and commercial pursuits as being as creditable as the callings traditionally known as the learned professions.

As an additional example of the growing respect in which the American style of practical education is coming to be held in England may be cited the increasing number of young Britons who are sent to the United States to obtain their education. Within the past year, also, a number of young Englishmen have been put into shops in Pittsburg and elsewhere in the United States as the best means of giving them a thoroughly practical knowledge of the best methods of factory management and of the trades with which they are to become identified in one capacity or another. All these young men will return home thoroughly imbued with American ideas, and will add increasing strength to the movement already proceeding toward the Americanization of British industrial life.

The common speech of Englishmen is beginning to show the effect of American contact. In London during the last summer it was not at all unusual to encounter characteristic American expressions in the conversation of bred-in-the-bone Britishers. Even American slang, which has been heretofore an unfathomed mystery, has made its insidious way into British conversation. Such expressions as "get there," "hustle," and even the horrible appellation "rubberneck" fall familiarly from English lips. British orthography shows numerous modifications. A few

years ago it was impossible to sell in England a book printed in America. No matter how popular the author or the book itself might be, it was necessary to have it reset, and to include all the British peculiarities of spelling. Now, however, this procedure is no longer considered necessary. English readers will accept books printed from American plates, and in numerous cases British printers themselves are discarding such forms as "honour" and "labour" in favor of the more simple American forms.

A thousand illustrations might be given from the petty and commonplace details of thought, conduct, and manners, which are also the significant and characteristic things of life, showing the progressive influence of our aggressive Americanism upon the British people. Both Americans and Englishmen can well afford to regard this closer relationship with equanimity, for it is certain to result in the encouragement of the best qualities of both peoples. It will make the Briton more adaptable, more thoroughly practical, less stiff-necked, and less insular. It will impart to the American qualities of conservatism and stability; it will render him less self-conscious and provincial. Best of all, it will promote a unity of plan and purpose, will bring about an appreciative understanding, and will establish a bond of sympathy that will be more effective in welding the two nations together than any political alliance possibly could be.

Since the preceding lines were written they have had a most striking exemplification in the profound display of British sympathy for the United States in the direful calamity of the President's assassination. Such an outpouring of friendly condolence on the part of one nation toward another is without parallel. It has occasioned surprise as well as extreme gratification in this country.

This touching evidence of friendly and sympathetic feeling has been explained very generally as a tribute to the personality of Mr. McKinley. To a certain extent this explanation accounts for it. Yet the display was too fervent and too widespread to be merely that; for it must be acknowledged that Mr. McKinley, though better known abroad than the majority of American presidents, nevertheless was a vague and unfamiliar personage to the majority of Englishmen.

The true explanation of this widespread appreciation, the sincerity of which can be in no wise doubted, is that it has been a manifestation of the new-born feeling of familiarity, admiration, and acquaintance which has come to Englishmen from the past few years of contact with Americans. It is the latest, most striking, and most touching evidence of the Americanization of England.

EARL MAYO.

## PROBLEMS OF IRRIGATION LEGISLATION.

It is more than probable that irrigation will occupy an important place in the discussions of the present Congress, and that legislation will be enacted which will inaugurate a new era in industrial development in the West. The world-wide movement toward the Pacific which has followed our recent achievements in war and commerce has awakened an interest in the vast, undeveloped region which separates the humid East from that ocean, and has stimulated a desire for its settlement. Expansion abroad promises to be followed by an equally momentous expansion at home.

There are other reasons why this subject is likely to receive attention from Congress. Hereafter, those who seek homes on the public domain must look for them in the arid part of the United States, where cultivated crops cannot be grown by the aid of rainfall alone. The homestead of the future must be irrigated. Before the settler can plant his fields with any hope of reaping a harvest, he must provide the water supply which the clouds do not furnish; and ability to do this will be the measure of settlement. The immigrant working alone cannot accomplish this. Formerly he could do so, but not now. The land which could be watered by small, cheap ditches has all been filed upon.

The further extension of the watered area requires either the diversion of large rivers or the storage of water which now flows down from the mountains when it cannot be used. In order to do either of these things, costly dams must be built to withstand the floods which beat against them; great canals, extending for miles to the remote tablelands, will have to be excavated; and expert engineering talent must be employed to design these structures and to prepare not less important plans for the management of the commerce in water which their construction will create. The day of individual effort has passed. Success in the future requires the organization of the irrigation industry and the expenditure of public or corporate funds on a scale not heretofore possible. Before rivers like the Missouri, the Big Horn, the Green, or the Columbia can

be put to use, irrigation works must be built rivalling in magnitude and cost those along the Ganges and the Nile.

This will not be done until there has been legislation by Congress. The arid States cannot do it, because they have not the means. Private capital will not, because experience has shown that costly private works to reclaim public lands are not profitable. Only Congress, as the custodian of the public domain, can provide the conditions indispensable to satisfactory progress. Because of these facts agricultural settlement in the West has been for many years slow; and unless more favorable conditions are secured the reclaiming of public land will soon be practically at an end. The conquest of the desert is a great undertaking; and even with all the aid Congress can be induced to extend, progress hereafter will not be rapid.

The desire of the West, however, is not so much for rapid development as for the creation of better social and industrial conditions. The first generation of home-makers is not longing for new ditches, new settlers, or increased demands on the water supply until it is assured of relief from the evils and uncertainties incident to the haphazard development of the past.

The most serious of these evils are the lack of water during part of the growing season, and controversies over its ownership when there is not enough for all. No one realized at the outset the importance which was to be assumed by rights to water in irrigation. Settlers diverted streams as they shot wild game on the plains, without any question of their right to do so, or any appreciation of the need of laws to protect this right in the future. Throughout a region larger than any European country except Russia, men explored creeks, rivulets, and rivers, to find places where land could be irrigated at small cost. When the bottom lands along the creeks and rivers of the plains had been filed upon, they climbed into the hills and diverted the rivulets which fed the streams below. In this way, farms which depend on the same supply extend across the Western plains for scores, hundreds, and even thousands of miles. The Missouri and the Colorado rise on opposite sides of the same mountain peak. The water of one finds its way into the Atlantic, that of the other into the Pacific. The use of these two rivers in irrigation has created oases of fruit and foliage in what was once an uninhabited desert, and supports populous communities in a dozen different States and Territories. Irrigation from the Colorado begins in the Salton Desert, 150 feet below sea level, and ends in Wyoming, 9,000 feet above. The ditch farthest south waters tropical plants; the crops grown under

the ditch farthest north have to withstand frosts during every month in the year.

The development over this vast area has gone on without regulation or restriction. Men have built ditches wherever they could, and as many as they pleased. In three States only are there official records of existing ditches which will show either investors or immigrants how much of the water supply is already controlled. In the other States newcomers have to rely on what they see or on what some one tells them. What they see is deceptive; what they are told is often based on an imperfect understanding of the situation. No one can tell, on looking at a river, how many ditches it supplies above, or how many claims to its waters exist below. Where irrigation is profitable and ditch-building easy, the temptation has been to build more ditches than the stream will fill. Men see rivers filled to overflowing during the season of flood, and fail to realize that they may run almost dry during the season of drouth. Attempts to save the water running to waste in April and May lead to the planting of many crops which the empty channel of August destroys.

In many irrigated districts crops are lost every year not because of lack of water, but because of its imperfect distribution. Streams are high when irrigators do not need water, and low when they do. To change this is the function of reservoirs. They are to regulate and supplement the natural flow, holding back the surplus when it is not needed, and turning it loose when it is. The need of these reservoirs is not prospective. On many streams there are already more cultivated fields, orchards, and gardens than the natural flow will maintain. It is only through storage that the fields already reclaimed can be kept green.

The existing canals in Salt River Valley, Arizona, will irrigate 250,000 acres of land. Much of this land has been already settled upon, but less than one-half is being cultivated. All that is needed to make the remainder fruitful is more water, and this can be had by storing the floods. Water enough comes down from the mountains, but it does not come down at the right time. The 100,000 acres now under cultivation represent not what can be done with the river, but what can be done with its low-water discharge. A similar condition of affairs exists along the South Platte and Arkansas rivers in Colorado, where only a fraction of the arable land below the canals is cultivated, and all of this has not the water it needs. If the water which runs to waste in the winter and spring were stored, irrigation would become to many in fact what it now is only in theory — an insurance against drouth. These conditions are not exceptional. They prevail on scores of streams

in Wyoming, Utah, Nevada, New Mexico, and California. They will appear on others as the reclaimed area is extended.

In recent years many small reservoirs have been built by irrigators. These, when located outside the channel of streams, have worked well. There is, however, another class of storage works which should be built by the Government, and should remain forever Government property. These are reservoirs located in the channels of running streams. These reservoirs have such relation to the lives and property of those living below them, and so vitally affect the interests of those having rights to the natural flow of the stream, that they always give rise to conflicts and controversies when they are built as private works, and a division has to be made of the public water of the stream and the private water of the reservoir. Wherever the supply of private reservoirs has to be carried past the headgates of needy irrigators, the public authority has to protect the distribution; and if the public has to divide the stored supply it had better own it.

In passing laws for the construction of reservoirs, Congress should take into account the needs of the people already in the arid region as well as of those who may desire to occupy the public lands. Some of the bills introduced in the last Congress proposed to apply the water supply made available by Congress exclusively to public lands. But if this were done, it would not aid in the best development of many sections. It would rather aggravate the evils which now exist. The settlers on the partly watered lands of Salt River Valley, Arizona, now have the hope that they may some day store the waters which run to waste, and relieve their shortage. But if the Government should construct reservoirs and apply the water exclusively to the irrigation of public land, not only would no relief be afforded to these struggling settlers, but all hope of future relief would be taken away. This does not mean that reservoirs will not make possible in many instances the reclamation of additional areas of public land; but the benefits from this will be small compared to the increase in production and the greater security the reservoirs will give to lands already settled.

The greatest opportunity for creating homes on the public domain is through the diversion of the unused rivers of the West, of which the Big Horn, the Missouri, the Columbia, the Grand, and the Green are notable examples. Along these rivers are millions of acres of public land. The soil is fertile, the climate is healthful and attractive, and all the conditions are favorable, except that the diversion of these rivers is costly and difficult. Storage is not needed, because there is an abundance of water

the year through. Immigrants have looked at these rivers with longing, but helpless, eyes. Their diversion should be a public work, not only because of its magnitude, but because the immense areas which these head works will dominate render it desirable that they should be under public management. The welfare of thousands of homes will be dependent upon their operations. Every consideration which has led to the public lighting of cities, and to the replacing of toll bridges by free bridges on country roads, applies with equal force to making these structures public works. If this is done without cost to the settlers below them, it will be no discrimination against many of the earlier settlers who selected the choice locations, and whose main canals cost less than will many of the laterals along the rivers where Government aid is desired.

The problems with which Congress should deal are not, however, of water alone, but of land and water. Those who object to Congress appropriating money for irrigation works say that it is the duty of each State to develop its own resources. To this the States reply that they do not control their resources, that the greater part of the land within their borders, including much of the land to be irrigated, belongs to the general Government, and cannot be made to contribute toward this development by any law which a State could enact. In Arizona nine acres out of every ten are public land, and contribute nothing to the expense of the State Government either in rentals or taxes. The owner of one acre, which he has improved without aid, justly objects to being taxed to improve the nine acres belonging to the United States. In California forty-three per cent of the land belongs to the United States, or is reserved and not subject to taxation, in Colorado sixty per cent, in Idaho eighty-three per cent, in Montana eighty-three per cent, in Nevada eighty-eight per cent, in Utah eighty-three per cent, and in Wyoming eighty-one per cent. These public lands are not a benefit, but a burden, to States, which have to build roads and bridges across them, and to protect life and property over vast areas from which no direct return is derived. The Western farmer cannot and will not improve the lands belonging to the United States, which, when improved, would be open to settlers from the East and West alike. Nor does he ask the Eastern farmer to help pay for their improvement. This is not necessary. It is possible to make such modifications of the present land laws as will provide all the aid which private enterprise needs to secure the complete utilization of the land susceptible of irrigation.

At the last session several bills were introduced into Congress proposing to set aside for the construction of irrigation works the proceeds

from the sales of public lands. This, it is to be hoped, marked the beginning of a reform in land legislation. But the simple setting aside of the proceeds from land sales is not all that is needed. The land laws should be changed. There is urgent need of modifications which will prevent speculative filing on land. While all the land laws were enacted for the benefit of settlers, in practice they have been made use of by many who never were farmers and never expect to be. Scores of meritorious irrigation enterprises have been wrecked by the speculative Desert, Preëmption, Timber Culture, or Homestead filings made on the land they were to water.

The repeal of the Preëmption and Timber Culture Acts, and the cutting down of desert land entries from 640 to 320 acres, have improved the situation. The passage of the Carey Act, under which the settler on a homestead must irrigate his land as well as live on it, was another advance. It would be a gain if the Desert Land Act were repealed, the irrigated homestead reduced to eighty acres, and cultivation required as well as residence.

There is also need of a law which will provide for the proper management and disposal of the grazing lands. Less than ten per cent of the remaining public domain can be irrigated. Over 400,000,000 acres have no agricultural value except for the scanty and nutritious grasses which grow upon them. This land is now an open common. Any one who desires can turn stock upon it. The grazing privilege is a valuable one, and there have been frequent armed conflicts over its control. This land, although public, is not unoccupied. For twenty years it has been a great breeding-ground for horses, cattle, and sheep, and its contribution to private and public wealth has been very great. The people who are using this land free of cost feel a natural desire to continue this use as long as possible; and any attempt to change existing conditions is certain to meet with vigorous protest. Many who are not satisfied with the present conditions fear that if any change is made it will result in the control of these lands passing to syndicates and corporations, and the exclusion from them of the small farmer or stock grower.

Nevertheless, the present situation is in many ways undesirable and unsatisfactory. Those who understand range conditions know that the unrestricted use of the public lands exists to-day in theory only. Those who desire to use these lands for the pasturage of cattle cannot do so in competition with those who desire to use them for sheep, as sheep will drive out the cattle. The struggle for control has led to the acquirement of thousands of miles of water front; for stock must have water as

well as grass, and whoever controls access to the stream controls the grazing land which borders it. Millions of acres of water fronts have passed into private hands in the last five years for this purpose alone. Immense areas of public domain are illegally fenced.

In one way and another there have been great waste and loss in the attempt to evade the misfit requirements of the public land laws. They do not suit the industries or climatic conditions of the arid region. Men have been forced in self-protection to resort to measures they dislike. The question which Congress should consider is whether some better system cannot be inaugurated. One thing greatly needed is a closer union of the irrigable and grazing lands. The area of an irrigated homestead should be reduced to provide homes for the largest number of people; but this reduction should be offset by giving each settler the right to lease or purchase a larger, but limited, area of grazing land. The chief industry pursued on the land of the arid region is the growing of live-stock. Uniting the irrigable and grazing lands would enable farmers to grow their winter's food supply on the irrigated land, and to support their stock in summer on the grazing land. It would divide the latter into a multitude of small holdings; would increase the number of people benefited; and would make the growing of live-stock attractive to many who are now repelled by the risks and controversies of the open range. It would also encourage the introduction of improved breeds of live-stock, which cannot now be placed on the open range because of the lack of control. Stock would be better fed and better cared for in winter; and a humane industry would replace the gamble with death by cold and starvation which is now a conspicuous figure of the open-range industry in many sections. It would enlist self-interest in the improvement of the native grasses where every influence now tends to their destruction.

The grazing lands, for the present, should be leased and not sold. The limits of irrigation have not been fixed, nor are the possibilities of these lands sufficiently known for the limits of the homestead to be marked out. Care should be taken that these leases do not interfere with homestead settlement. This can be done by having the lands classified by the general Government, and the grazing and irrigable areas segregated, or by having every lease subject to entry under the present land laws.

The object of leasing would be to bring about more settled conditions, to give the irrigator a more secure tenure in the use of the grazing lands he needs, and to protect the native grasses; but if leasing is adopted it

will inevitably result in returning to the Government a large sum of money. At a rent of one cent an acre the annual income would be $4,000,000. The experience of the arid States in leasing lands shows that an even larger sum could be readily secured. Colorado leases over 3,500,000 acres at an average rental of eight cents an acre. Montana leases nearly 1,000,000 acres of State land at a rental of over eleven cents an acre. Wyoming leases nearly 2,000,000 acres at an average of over four cents an acre. The rentals in Utah average nearly six cents an acre. The Union and Northern Pacific railways lease nearly 2,000,000 acres at rentals varying from one to seven cents an acre.

Appropriations for irrigation by Congress will bring this country face to face with a new political issue. This is the adjustment of State and Federal authority over the water resources of the West. Thus far State control has been absolute and unquestioned; but if Congress provides an additional water supply some arrangement must be made for the distribution of the supply. It would hardly be possible to have a State administration over the natural flow of the stream, and a national administration over the stored supply along the same stream. Any uncertainty regarding jurisdiction would be likely to create friction and to work badly in another direction. It would lessen the efficiency of State administration in States having satisfactory laws, and would prevent improvements in the States which have bad laws.

At the same time there must be some assurance that the additional water supply made available by the public funds shall benefit actual users and not enrich the holders of speculative rights. The irrigation codes of some of the arid States afford such assurance. These States are ready to receive aid, and it is certain that they will make wise use of it. But there are States where no one knows what would happen if the Government built reservoirs or canals without any provision for the establishment or protection of rights to the water supply made available; and there are other States where the common-law doctrine of riparian rights would menace the success of Government reservoirs as it now menaces private ones.

The advocates of national aid are not agreed regarding the policy to be adopted. Some urge national control as well as national aid. They believe that the differences in State laws and the division of streams crossing State lines require that the Government should take entire charge of the distribution of water. Those who oppose this favor the continuation of State control, and call attention to the magnitude of the interests already created under State laws, and dependent on these laws for stabil-

ity and value. Titles to water along thousands of water-courses have been established by State tribunals. The rights vested have an incredible value. They control the productiveness of many million acres of land. The water rights on the little creek first used by the Mormons are worth $1,600,000. The best estimate of the value of water rights in Colorado places them at $90,000,000; and the titles to similar property in California are worth at least an equal sum. For the general Government at this late date to assume control would inevitably cause a radical disturbance of existing conditions. The differences in State laws are fundamental; and a national law which would operate everywhere alike would be revolutionary in some States. It would disturb local usages and customs to which communities are wedded and which irrigators understand. Laws for the control of an element so vital and necessary to human life as water will work well only when they have the sanction of the people most concerned; and, notwithstanding the mistakes which have been made, it is the preponderating belief of those best informed that the effort of the Government should be confined to aiding the States, and should leave it to those States to create their own administrative systems, and work out their own problems. In doing this it would be leaving the solution of these issues to the people most familiar with the subject, and most interested in the success of the industry, and hence would be entrusting it to the highest intelligence which can be enlisted.

ELWOOD MEAD.

## RECIPROCITY WITH CANADA.

GEOGRAPHICAL and ethnic conditions have always suggested to the Canadian that broad and liberal trade relations with the United States would be natural and mutually advantageous. He has invariably acted upon this view, and the repeated rejection of his overtures has not seriously shaken his faith in the doctrine that the present trade situation could be easily changed for the better. In 1854 the efforts he made for more liberal terms were crowned with success through the negotiation and ratification of a reciprocity treaty which was to continue in force for twelve years, and then to be terminable at one year's notice. This treaty provided reciprocal entry for the natural products of each country into the markets of the other. Under its provisions there followed a great expansion of trade between the two countries, an increase of social intercourse, and an advance in the direction of community of interest.

Notice of the abrogation of the reciprocity treaty of 1854 was given by the United States Government in 1865. The primary cause of this action was supposed to be a feeling of resentment provoked by the fact that news of the Federal defeat at Chancellorsville had been received with cheers by the majority of the Tory members of the Canadian Parliament, then in session at Quebec. At this time public feeling in Canada regarding the War of the Rebellion ran high. The Liberals of the country almost to a man sympathized with the North, while the Tories, as a rule, sympathized with the South. The action of the United States in giving notice of the abrogation of the treaty was ill-judged, if it was prompted by this incident. There were copperheads in the North, in no insignificant numbers, as ready to cheer over Federal reverses as was the Tory contingent in the Canadian Parliament. No less than 40,000 Canadians had aided in fighting the battles of the Union. The majority of the people of Canada were intensely sympathetic with that cause, and the abrogation of the treaty was a wet blanket upon their zeal; tending to strengthen and spread the feeling for which it was supposed to be designed as a punishment.

It was contended that the operation of the treaty gave the greater

advantages to Canada. To a limited extent, and in the narrow sphere of present results, this may possibly have been true; but a statesmanlike view of the operation of causes that would tell upon the future was not taken by those who held this opinion. A sordid reckoning as to which of the parties to the agreement sold the most was allowed to hide from view the march of destiny and the fraternal blending of the unmeasured forces of the future. If the treaty in its practical workings was unsatisfactory to the United States, Canada was ready to modify its provisions; it was, in fact, anxious to do so. Before the fated day of abrogation arrived, Canadian envoys had visited Washington to plead for the continuance of fraternal trade relations, under a treaty to be modified in any way that was reasonable and just. Their reception was a rebuff — cold, positive, and absolute. They returned from their fruitless errand; and Canada at once set about the confederation of the British North American Provinces, a task which was accomplished in 1867.

In twelve years the treaty had more than quadrupled the amount of trade between Canada and the United States, and had led to a very large increase in the importation of American manufactures into Canada. The War of the Rebellion had created a demand for Canadian farm products greater than would have existed under normal conditions; and the exportation of natural products to the United States in 1866, the last year in which the treaty remained in force, was greatly stimulated by the approaching abrogation, the date of which was known in advance. In that year the total export of the British North American Provinces to the United States, including estimated short returns from inland ports of $4,185,692, was $44,143,908. This amount was composed in large part of farm products, namely, animals and their products $11,319,243, and agricultural products $13,722,721, these two items together amounting to $25,041,964. In the same year the British American imports from the United States amounted to $28,572,000, a considerable proportion of which consisted of manufactures. It will be borne in mind that the imports into Canada for the year 1866 were made in the natural course of trade, while the exports, for the reason above stated, were abnormal in amount. It is reasonable to conclude that the tendency under natural conditions would have been to secure the equalization of exports and imports.

In 1866 the British-American exports to Great Britain amounted to $16,826,000, and the imports from Great Britain to $40,062,000. The most considerable items on the list of exports consisted of forest products and ships built at Quebec. The exports of farm products from the Prov-

inces of Nova Scotia, New Brunswick, and Prince Edward Island were inconsiderable. From the United Provinces of Canada they were as follows: animals and their produce $1,326,000, and agricultural products $2,217,000, making a total of $3,543,000. The imports from Great Britain consisted largely of manufactures. It will thus be seen that in the last year of the operation of the reciprocity treaty of 1854 the chief market for Canada's farm products was the United States, while the chief source of supply for its manufactures was Great Britain.

Following the abrogation of the reciprocity treaty came the imposition by the United States of duties upon farm products. These duties were of an almost prohibitory character. It is not unlikely that the belief was entertained that Canada required access to the American market for her surplus farm products, and that duties reaching to the limit of exclusion would force political union. If this opinion was entertained, events proved it to be utterly mistaken. The policy of repression at once begat bitterness and deep-seated resentment, and the two peoples commenced to drift asunder. The Canadian was put upon his mettle, and proceeded to cast about for new markets. The American was no longer asked to act as his factor in the exportation of such farm products as had previously figured as a part of American imports. The Canadian quest for new markets was successful. In due time the export of farm products to the United States dwindled to an insignificant fraction of the total Canadian export in that line, and Canada became a purchaser of American farm products for her own consumption, nearly up to the limit of her total export of such products to the United States in 1866.

In the meantime Canada maintained a wise and moderate tariff policy toward the United States. The percentage of duty upon the total value of goods entered for consumption amounted to 12.25 in 1868, to 15.98 in 1900, and to 16.06 in 1901. It never rose above 21.57, which was the rate in 1888. During all the period from 1868 to 1901 the duty upon American goods entered for consumption was less than the average duties upon the amount of goods entered for consumption from all other countries; the duties upon the total American imports in 1901 having amounted to no more than 12.05, while those upon dutiable imports were 24.83. This moderate revenue tariff offered no obstacle to the liberal importation of American goods; and while repressive American duties kept Canadian exports to the United States at a standstill, the Canadian imports from the United States increased until in 1901 they were four times what they were in 1866.

Canada is now the third largest customer the United States has in

the world; Great Britain and Germany taking the precedence. In 1900 the total importation of Canada from the United States amounted to $116,972,000, or $21.65 per head. In the same year the total imports from the United States by Mexico, Central America, South America, and all the West Indies, except Cuba and Porto Rico, amounted to no more than $96,140,000, or $1.70 per head.

The opinion seems to be held in the United States that the trade conditions prevailing in 1866 continue to-day, and that Canada is still dependent upon the United States for a market for her agricultural products. The sooner the American learns that this impression is utterly without foundation, the sooner will a true appreciation of existing conditions be reached.

The following statement of trade returns between the United States and Canada, and between Canada and other countries, during the fiscal year ending June 30, 1901, will afford the premises from which to draw correct conclusions. These tables are compiled from advance statements by the Customs Department at Ottawa, and may be slightly varied upon careful revision for official publication:

CANADIAN TRADE WITH THE UNITED STATES.

| | |
|---|---|
| Total imports from the United States | $119,306,000 |
| Imports from the United States for consumption | 110,485,000 |
| Dutiable imports from the United States for consumption | 53,600,000 |
| Free imports from the United States for consumption | 56,884,000 |
| Total exports to the United States | 70,306,000 |
| Exports to the United States ex foreign mdse | 67,983,000 |
| Portion of same coin, bullion, gold dust, etc | 28,486,000 |
| Actual export domestic produce | 39,497,000 |
| Deducting domestic produce exports from goods entered for consumption, actual balance of trade with the United States against Canada | 70,988,000 |

CANADIAN TRADE WITH GREAT BRITAIN.

| | |
|---|---|
| Total imports from Great Britain | $43,164,000 |
| Imports for consumption | 43,018,000 |
| Total exports to Great Britain, produce of Canada | 92,857,000 |
| Total exports | 105,328,000 |

CANADIAN TRADE WITH ALL OTHER COUNTRIES.

| | |
|---|---|
| Total imports from all other countries | $27,945,000 |
| Imports for consumption | 27,734,000 |
| Exports to all other countries, the produce of Canada | 16,591,000 |
| Total exports | 20,753,000 |

The totals of free imports for this year were: from the United States, $56,884,000, or 73 per cent; from Great Britain, $11,316,000, or 17.3 per cent; and from all other countries, $7,469,000, or 9.7 per cent. The rates of duty were as follows: From all countries, entered for consumption 16.06, dutiable 27.46; from the United States, entered for consumption 12.05, dutiable 24.83; and from Great Britain, entered for consumption 18.23, dutiable 24.71. Out of the total of Canadian imports 63 per cent came from the United States, 22½ per cent from Great Britain, and 14½ per cent from all other countries. Of exports not including precious metals, the United States took 21 per cent, and Great Britain 53½ per cent.

It is too early to attempt an analysis of the Canadian import returns for 1901, for the purpose of ascertaining the importation of manufactures for that year by Canada from the United States and from Great Britain; but the returns of 1900 will serve the purpose. For that year the Canadian imports of manufactures from the United States and from Great Britain were as follows: From Great Britain, value of free manufactures $7,610,477, dutiable manufactures $30,377,084; making a total of $37,987,561. From the United States, free manufactures $18,021,365, dutiable manufactures $44,837,580; making a total of $62,858,945.

In 1898 the importation of manufactures, free and dutiable, from Great Britain was $26,732,584, and from the United States $43,834,769.

The importation of manufactures for 1901 as compared with 1900 has probably increased in the case of the United States, and fallen off in the case of Great Britain, as the imports for consumption had risen from $109,844,000 to $110,485,000 in the case of the United States, and had fallen from $44,789,000 to $43,018,000 in the case of Great Britain.

The Dominion possesses the great stretches of productive soil upon this continent that still remain unoccupied. The trend of the isothermal line to the northwest of Lake Superior brings within the wheat belt a region extending eight degrees northward from the boundary line, and embracing the Peace River valley. In 1901 as many as 45,000,000 bushels of wheat were produced in Manitoba and the Canadian Northwest from 2,000,000 acres of land. There are from 250,000,000 to 450,000,000 acres more of wheat land in that country waiting to respond with bountiful harvests to the invitation of the plough; and as many as 50,000,000 inhabitants may find homes and subsistence in this part of the Dominion.

In 1901 Canada's trade in farm products with Great Britain and the United States was as follows:

EXPORTS TO THE UNITED STATES.

| | |
|---|---|
| Agricultural products, the produce of Canada | $2,907,924 |
| Agricultural products, foreign produce | 338,842 |
| Total | $3,246,766 |
| Animals and their products, produce of Canada | $5,331,657 |
| Animals and their products, foreign produce | 286,947 |
| Total | $5,618,606 |
| Total export of farm products | $8,865,372 |
| Total export of farm products, the produce of Canada | 8,239,581 |

EXPORTS TO GREAT BRITAIN

| | |
|---|---|
| Agricultural products, produce of Canada | $17,337,675 |
| Agricultural products, foreign | 11,502,620 |
| Total | $28,840,295 |
| Animals and their products, produce of Canada | $49,186,025 |
| Animals and their products, foreign | 500,744 |
| Total | $49,686,767 |
| Total export of farm products | $78,527,062 |
| Total export, produce of Canada | 66,523,700 |

IMPORTS FOR CONSUMPTION FROM THE UNITED STATES.

| | |
|---|---|
| Agricultural products free | $14,923,080 |
| Agricultural products dutiable | 2,997,202 |
| Total | $17,920,282 |
| Animals and their products free | $4,587,785 |
| Animals and their products dutiable | 2,961,973 |
| Total | $7,549,758 |
| Total imports farm products | $25,470,040 |
| Portion of the same free | 19,510,865 |

IMPORTS FROM ALL OTHER COUNTRIES, INCLUDING GREAT BRITAIN.

| | |
|---|---|
| Agricultural products free | $687,626 |
| Agricultural products dutiable | 531,904 |
| Total | $1,219,520 |
| Animals and their products free | $3,429,356 |
| Animals and products dutiable | 100,950 |
| Total animals and products | $3,530,306 |
| Total farm products | $4,749,826 |

Of the $63,000,000 of manufactures purchased by Canada from the United States in 1900, Canadian farmers purchased quite $30,000,000. They were permitted in return to project a dole of $8,239,000 of farm products over the tariff wall of the United States, and to see brought into Canada from the United States, free of duty, hides and skins to the value of $2,432,000, wool $398,000, horses $90,000, broom corn $209,000, hemp $299,000, Indian corn $6,484,000, flaxseed $662,000, tobacco leaf $1,720,000, raw cotton $4,731,000, and some other articles of less value; making a total of free farm products imported from the United States amounting to $19,500,000. Naturally, the farmer thinks some kind of readjustment would be proper; and he will take very kindly to the suggestion that it would be better to have the goods manufactured in places where he could furnish the operatives with the food they consume, and with some of the raw materials required in the production. Of the farm products upon the export and import list, Canada bought of the United States to the extent of $24,058,000 in excess of her sales to that country, while the United States bought of Canada, in excess of her sales to that country, articles amounting to $1,411,000. Canada bought of the United States, in excess of her sales to that country, the following farm products, for consumption: Corn, oats, rye, wheat, cornmeal, oatmeal, rye and wheat flour, malt, seeds, apples, small fruits, potatoes, vegetables, tobacco leaf, broom corn, hemp, flaxseed, horses, hogs, poultry, eggs, butter, lard, bacon and hams, beef salted in barrels, pork in barrels, other meats, grease, hides and skins, wool, and many minor articles.

Some of the facts above set forth may be briefly summarized as follows: (1) The Canadian tariff rates are less than one-half those of the United States. (2) The Canadian exports of farm products to the United States are only one-third as much as in 1866. (3) Canadian imports from the United States are now over four times what they were in 1866. (4) Canadian imports from Great Britain have increased less than ten per cent since 1866. (5) Canadian exports of farm products to Great Britain have increased twenty-fold since 1866. (6) Canada buys three times as much from the United States as she sells to that country, leaving out of account the precious metals. (7) Without including raw cotton, Canada buys from the United States two and a half times the amount of farm products that she sells to that country. (8) Canada buys at least $10,000,000 more manufactures from the United States than from all the rest of the world. (9) Canada finds her chief market for farm products in Great Britain. (10) Of the total imports of Canada sixty-three per cent comes from the United States. (11) Canada gives

the United States a free list of $56,884,000, or seventy-three per cent of her entire free list. Included in the free list from the United States are $39,000,000 of free farm products, free forest products, and free manufactures. (12) Canada receives practically no free list from the United States, except the precious metals.

Canada cannot afford to continue the present state of trade relations with the United States. They do not serve to promote her prosperity. Her purchases from the United States must be paid for, in a large part, from the proceeds of sales of her products to other countries. If she is to be a hewer of wood and drawer of water, she wants at least the privilege of selling the wood. The United States can easily give to her a kind of reciprocity that will put matters upon the proper basis, by enabling her to sell her products in the markets of the United States to an amount somewhat approaching the extent of her purchases from that country. Failing to secure this arrangement, Canada can give to the United States a kind of reciprocity that will make the volume of imports from that country nearly as lean and hungry as is the present scale of exportation to it. The simple formula for securing this result is to adopt the American tariff; and Canada is rapidly settling down to the conviction that there should be no unnecessary delay in taking this course, if proper concessions cannot be obtained.

The supply of raw material for paper-making has become a matter of much importance to the paper mills of the United States. Canada possesses a great reserve of spruce timber suited to that use. Her public men fully appreciate the importance of such a possession. No obstacle has yet been placed in the way of the exportation of pulp wood; but it would be natural, in a possible movement for reciprocity of tariffs, to require the manufacture of Canadian pulp wood into paper in Canada. This course would very likely be taken, as has already been the case with saw-logs and lumber manufacture.

The change in the fiscal relations of the two countries that would form a reasonable and proper basis of adjustment would be to make the natural products of the farm, the forest, the mine, and the sea reciprocally free, and to provide that Canada should not discriminate in her tariff rates in favor of other countries. At first sight this may seem rather a sweeping proposition. The lumberman who wants to hasten the extinction of the American forests, and the farmer who has the faith, born of ignorance of the facts, that the small Canadian surplus of farm products that might find a market for consumption in the United States would swamp the vast production of that country, will loudly protest.

This proposal, however, for reciprocally free natural products will be found, upon examination, a reasonable one. It must be borne in mind at the outset, as before stated, that Canada consumes farm products from America amounting to two and a half times the total of her own export of farm products to that country. Free trade would greatly stimulate this consumption; for, with the exception of Indian corn, all the cereals, flour, meal, fruits, animals, butter, cheese, lard, eggs, meats of various kinds, seeds, potatoes, vegetables, etc., pay, when imported into Canada, duties nearly or quite equal to those levied upon similar articles by the United States. Under free trade British Columbia and the Klondike region would buy their food supplies from Washington and Oregon. The Maritime Provinces—Nova Scotia, New Brunswick, and Prince Edward Island—with a population of 925,000, would buy their food supplies from cities upon the American seaboard. Ontario and Quebec would buy largely of Indian corn, as at present, together with increased quantities of coarse grains, flour, pork, and meats for the use of men engaged in lumbering and mining operations.

It is not improbable that Canadian purchases of farm products would still exceed Canadian sales for consumption in the same lines to the United States, and it is certain that the balance against the United States would not be large in this interchange of farm products. It is not probable that the Canadian export of such products would be more than six times as great as at present, or more than double the export under the stimulus of war demand and impending reciprocity abrogation in 1866, or in round numbers, say, $50,000,000. It is also likely that, under the stimulus of free admission, the Canadian imports of farm products, amounting in 1901, without raw cotton, to $20,737,000, would be doubled, which would leave a balance of about $8,000,000 between export and import of farm products. The exports of forest products, amounting in 1901 to $12,205,000, and of mine products, amounting to $38,501,000, which included $26,824,000 of gold dust, nuggets, gold-bearing quartz, and silver concentrates, would be increased; but the total increase in the export of all lines of natural products would hardly amount to a sum equal to three-fifths of the actual American balance of trade against Canada last year. In the meantime the general stimulus to trade, resulting from making natural products free, would largely increase the Canadian importation of American manufactures and other commodities; and it is certain that under the proposed new arrangement the United States would continue to score large annual balances of trade against Canada.

In the case of all articles of farm produce, of which the United States and Canada have a considerable surplus for sale in Great Britain and other foreign markets, free trade between the two countries would have little or no effect upon prices. This would apply to wheat, flour, bacon, hams, pork in barrels, cheese, etc. The Canadian producer might benefit, to a limited extent, through competition between American and Canadian buyers in his own market, because rings and combinations of buyers would be more difficult to establish and maintain than if the American buyer were excluded. In the case of articles exported to the United States for consumption, free trade would have no appreciable effect upon prices, because of the insignificant amount of importation compared with the great volume of production in the United States. In the case of sawn lumber the importation into the United States from Canada, for consumption, amounted last year to about 500,000,000 feet, board measure, which was less than one and a half per cent of the quantity of lumber manufactured in the United States. To assert that one and a half per cent will depress ninety-eight and a half per cent to the extent of the duty, or will even affect prices in any material degree, is absurd.

This view of the case was placed before the American members of the Trade Committee, when the Joint High Commission met in 1898; and the Hon. Nelson Dingley freely admitted that American lumber prices could not be appreciably affected by the importation of Canadian lumber free of duty, with the amount then imported, or likely to be imported. The same conditions would hold good with regard to eggs, barley, vegetables, potatoes, cheese, butter, and other articles of farm produce likely to be exported from Canada to the United States for consumption. The disparity between the volume of importation and that of domestic production would be even greater in the case of these articles than in the case of lumber, and free trade could not to any material extent affect prices. The Canadian lumberman and farmer desire free access to the American market, but not for the purpose of depressing prices in that country to the present level of prices in Canada, where difference of price exists, because that would do them no good. Their desire for free trade arises from the expectation that the Canadian price will be increased to the extent of the duty when the latter is removed. In the case of failure of a crop, or great scarcity of any article, free trade might in exceptional cases relieve the strain and affect prices, to the benefit of all classes, in either country.

Absolute free trade has existed between all the States of the Ameri-

can Union since the Constitution was adopted. Its operation has been entirely satisfactory. It has furnished the most absolute vindication of the wisdom of dispensing with tariff restrictions. Between different States and different groups of States, great diversity of soil, climate, production, and general conditions have always existed. These differences are as great as those dividing the Canadian Provinces and Territories from the American Union. The logical application of the principle of protection would have called for duties upon the agricultural products of the fertile West, in behalf of the farming interests of the less-favored New England and Middle States; and also for duties upon the goods produced in the well-established manufacturing plants of the Eastern States, in favor of the new and struggling industries of the Mississippi valley and the Pacific slope.

The assertion that such a policy would have promoted the welfare and prosperity of the Union would be absurd. The humblest citizen knows that, with every extension of the area over which the system of free interstate commerce prevails, the more apparent become the advantages conferred by that system. The nearer the approach to this system in the trade policy of the United States and Canada, the better for both countries; for similar results to those that have followed the application of the system of free trade in the United States would follow its application to the great Canadian domain. A Zollverein would perhaps be the truly scientific and effectual method; but years of trade repression and business estrangement and the development of a vast export trade with the Motherland make this an unattainable arrangement at the present time. Free trade in natural products and moderate revenue duties upon a reasonable schedule of finished products, as at present in Canada, with application of the most-favored-nation treatment by each country to the other, will prove infinitely more satisfactory than present conditions, and will naturally lead up to such further developments as will accord with the wishes and the interests of both countries.

The opening of the nineteenth century found North America inhabited by 5,500,000 English-speaking people. At the close of the century the number had increased to 80,000,000; and an area of 7,000,000 square miles, rich in all the resources that the most advanced form of civilization requires, is now the heritage of the American Anglo-Saxon. The history of the last hundred years is a glorious record of progress and expansion for these peoples. The United States has suddenly stepped to the front as a great world power, and will be content with nothing short of the foremost manufacturing, commercial, and naval

position. The world is respectfully taking the measure of the new Colossus, and forgets to indulge in the old-time criticisms about swagger, rawness, and self-assertion. The portals of the twentieth century have opened, and down the vista of its one hundred eventful years to come there looms the shadowy, half-defined, half-concealed revelation of mighty achievements and illimitable accretions of force. While this great power commands the attention of the world, a younger member of the galaxy of Anglo-Saxon commonwealths is rounding into national life, and has laid wisely the foundations of its political structure, adhering closely to the structure and spirit of the form of government that has been shaped in the furnace of conflicts, and evolved from contact with difficulties and by the application of the lessons learned during a thousand years. Experience shows that the British model will well serve the purpose of Canada. The young nation is taking stock of its immense resources, and looking forward to the day when its people will number a hundred millions. The future of these two great commonwealths upon the American continent is a matter of great importance to the world, and of greater importance to themselves. It will be a great disaster if the policy of the last thirty-five years is continued by the United States, with the probable result of being imitated by Canada. Let us hope rather that the American policy of free trade within the Union will be imitated as far as may be permitted by circumstances, and may be consistent with the preservation of separate national autonomy, and that provision will speedily be made for the development of a vast and mutually advantageous commerce, for the growth of friendly relations, and for the securing of a permanent peace.

JOHN CHARLTON.

## THE PHILIPPINES AND OUR MILITARY POWER.

It is related that, after the signing of the treaty which ceded the Philippine Islands to the United States, Señor Sagasta, the Spanish Prime Minister, said: "Now is Spain avenged." How true has this prediction proved! The Philippine Islands have already cost our Government more than $300,000,000, and many of the best of the youth of our land. Their acquisition may transform us from a peaceful into a warlike nation. Victor Cousin was not without reason when he said: "Tell me the geography of a country, and I will tell you its future."

Continuous territory is the least vulnerable form of possessions. It is a rule of warfare, as unerring as the instinct of self-interest, that the enemy should always be attacked at its weakest point. We followed that rule in the late war with Spain. We did not engage her upon her home territory because we knew it would require ten times the men and ships to enforce submission. We made our assaults upon her most vulnerable possessions, namely, Cuba and the Philippines, 3,000 and 13,000 miles, respectively, from her base of operations. We attacked her in the two colonies where the people were in open revolt against Spanish tyranny and oppression, and where we knew we should receive coöperation and assistance.

Foreign powers have hitherto hesitated to make war upon us, because of the knowledge that, even if successful, they could not permanently hold any of our territory. The rulers of foreign nations knew with certainty that even if they could accomplish the difficult feat of occupying and annexing a portion of our continuous country, the succeeding years would undoubtedly be spent by our nation, as well as by the inhabitants of the annexed territory, in preparing to overthrow the rule of the foreign power. The fear of such a result and the knowledge of the enormous advantage possessed by those who fight in defence of home and country have prevented even the dream of a war of conquest against us. The continuity of our territory not only prevents attack, but also enables us to determine at our will when we shall go to war. If we are not ready when the cause arises we can wait in our impregnable country until we are prepared, as

we did just before the late Spanish War. It also gives us the choice of the place of battle. As Mr. Gladstone once said: "The distinction between a continuous empire and one severed and dispersed over the seas is vital."

With the acquisition of islands 7,000 miles from our shores, how changed becomes the situation! In our first conflict with a European nation, the scene of action will be shifted to the Philippines. Our foe will see the importance of attacking our weakest point, and will take advantage of the fact that the people of those islands have recently been in arms against us; knowing full well that where death in such a conflict has embittered so many families, the spirit of insurrection will continue for at least a generation. On account of these disadvantages, some difficulties with foreign powers are likely to develop into wars, which would probably never have occurred had not the vulnerability of these far-away islands been an allurement to the aggressive spirit of warlike nations.

If we are to retain the Philippines, what must be done to overcome the disadvantage of their situation? We want no such surprises as Spain received from us. It becomes necessary to fortify the seaboard cities and towns, and to retain in the islands a force sufficient not only to prevent insurrection, but to repel foreign attack. It will be further necessary nearly to double the proper strength of our navy, so that in case of war we may be able to retain on our own coast the ships necessary for our defence and also to have in the Archipelago fleets sufficiently large to meet the enemy and to engage him with success. Although the total area of the Philippines is about the same as that of New Mexico, it is divided into so many islands that the seacoast to be defended must nearly equal that of all the States bordering upon the Atlantic and Pacific Oceans.

But what will be the cost of all this? The numerous seaboard cities cannot be fortified for less than tens of millions of dollars. The army of occupation scattered among these many islands to prevent foreign aggression and domestic insurrection cannot be safely reduced below 30,000 men. The cost of such an army, based upon former appropriations of Congress, cannot be less than $45,000,000 per annum. The army already there is costing more than $65,000,000 a year. General Wesley Merritt, in a recent interview, said: "Doubtless the American people will be sorry to be assured that a permanent army of 40,000 soldiers will be required to hold the Philippines; but conservative officers on the spot are convinced that this view of the situation is correct."

The Government expends about $3,000,000 for the building of each battleship, and a large amount each year to repair it, although after fifteen or twenty years it will become antiquated and useless.

Whence are we to obtain all the money which it is so necessary to expend in order to keep a firm grasp upon these distant possessions? It cannot be collected from the Philippine people; for, although they have been paying most of the exorbitant taxes imposed by Spain, the revenue is not more than sufficient to meet the expenditures of their civil government. It is quite likely that the revenues will be insufficient for that purpose when the school system is in full operation, and the numerous necessary improvements, such as roads, bridges, public buildings, and harbors, are made. These military and naval expenses can come only from our national Treasury, and apparently the outlay will be perpetual.

The great wealth and development of our country have arisen from the fact that we have had peace, and that we have not been compelled to impose a constant tax on our industries and people to maintain large armies and navies. With our sovereignty removed from the Philippines, and with our sources of income practically unlimited, we should still be able to pursue our policy of peace and good will without fear of foreign aggression.

In view of the situation in China, the Philippine Islands are supposed by some to be of great strategic value. It is very improbable that we shall ever have any difficulty with the Chinese, because our interest is identical with theirs, namely, the preservation of the integrity of the Chinese Empire. But even if it were otherwise, why keep soldiers 600 to 1,500 miles from the possible scene of action, with a very limited transport service — and it is suggested, by the way, that this should be sold — when we could place them on our own concession at Shanghai, as the French, Germans, and English have done?

The decision as to whether we are to hold the Philippine Islands involves, therefore, the question, whether we are willing to relinquish concentration for diffusion; to exchange land power, our natural strength, as to which we have enormous advantages, for sea power, as to which we have no peculiar advantage; and to give to the enemy in each conflict the choice of weapons, as well as of time and place of battle. With our military power upon land, we need neither a large army nor a large navy, and require only a light taxation upon the industries and people of the nation, which means prosperity. Exchanging this for sea power, we shall need a navy equal or superior to that of any warlike nation, and

also a large army to sustain the results of our naval engagements; involving taxation which will so cripple many of our industries that they will be unable to compete for trade in the markets of the world, which means adversity.

Why pursue a course which will weaken the military strength of our nation, which will make a greater drain upon the Treasury than will be counterbalanced by the profits it will give to commerce, and which will compel us to abandon the policy under which we have grown so great? Why give up the advantages of a peaceful people for the disadvantages of a warlike people? "They that take the sword shall perish with the sword." That judgment threatens not man alone, but also every nation that indulges the dream of universal empire. Why not avoid the stupendous blunder of the acquisition of these islands, by helping their people to establish a government of their own, based upon Republican principles, and thereby continue to be the beacon-light of liberty and civilization to all the world?

JOHN F. SHAFROTH.

## THE CHINESE IN AMERICA.

THE Chinaman in America, as a social entity, is almost entirely unknown. He is an alien, whether Christian or "heathen." He is shy and self-contained, and a mystery to the great majority of Americans, who have little sympathy with him. He does not assimilate readily with other people. While there is often much in common between men of white, black, and red skins, the yellow man is rarely a party to their affairs. Among the reasons for this are the great disparity in their habits and customs; and the facts that their languages have nothing in common at the base, and that their physical characteristics are utterly at variance. Further, the Chinaman is barred by the law from citizenship, and, therefore, is practically without the pale of communal interests.

The Chinaman has a certain power commercially, but none whatever politically. Only those who have become interested in the Chinese through acquaintance with them in the Christian missions here or abroad, or through business relations, know anything of their habits, their methods of living, their industries, their excellences, or their vices. For their own protection they have been compelled to live entirely by themselves. There are no more clannish people on earth than the Chinese in America. Other immigrants in this country are slowly, but surely, assimilated until all become Americans; but the Chinaman remains a Chinaman, for the number of Chinese-Americans is ridiculously small.

The greatest barrier to the complete Americanization of the Chinese is the fact that they cannot become citizens; next is the air of mystery that has been thrown about them. The Chinese have been pictured as a peculiar, unknown, and dangerous element, given to strange and abhorrent vices, and as a people earning much and spending little, that they might drain this country of its wealth for the benefit of China. It has been said that they are utterly without sympathy for this country, the country of their permanent or temporary abode. The fact is that the Chinese are as little understood by the Americans as are the Americans by the Chinese. The result is an unfortunate suspicion on both sides.

The law of the United States prohibiting the immigration of the Chinese has not a parallel in the world. The coming of the Chinese into this country was not of their own volition; they were invited here. When the Central Pacific railroad was building it was found impossible to get enough laborers to carry on the work. One thousand miles of road had to be laid across desert and mountain. It was more than 3,000 miles from the great centres of population where alone unemployed labor could be found, and the only means of transportation were very slow and expensive. The road needed at least 10,000 laborers, but not more than 800 white men could be secured. In this extremity it was suggested that the over-populated provinces near the Chinese seacoast be drawn upon. At first this was looked upon as a dangerous experiment from an economic point of view, because it was thought that Chinamen were too light of body and not sufficiently muscular for the work. A few were imported, and these readily learned how to do what was required of them, and soon excelled the white men in earth and rock work. They proved to be patient and reliable. The coolie ships were kept running between the Kwang-tung province and San Francisco until the railroad was fully supplied with Chinese laborers. The Chinese were paid thirty-five dollars a month and boarded themselves; white laborers got forty-five dollars a month and were boarded.

When the railroad was finished more than 15,000 Chinamen were turned loose on the country to find support. Railroad building, which was becoming active in the West, employed a great many; but the steamship companies, actuated by greed, kept bringing cargo after cargo of Chinamen, who had been induced to emigrate by the agents of the companies in China on the promise of railroad work when they reached America. The Chinamen already in America fostered the desire of their countrymen to come here by sending back their earnings to pay the passage of brothers and friends. When, therefore, the big transcontinental roads were finished, the idle Chinamen flocked into the towns of California and other Western States, looking for work.

In the meantime, the Eastern immigrant agents of the new railroads, in their desire to increase the business of their roads, were busy inducing men to go to California to make their fortunes. As a result, San Francisco was crowded with all sorts and conditions of men in search of work. White immigrants from Europe were taken from the docks and across the continent; boys left farms and villages in the Eastern States and set out for the Californian El Dorado. When they got to San Francisco they found the work being done by the Chinese. Why? Because

the Chinese, being dexterous and imitative, readily learned new trades, and were willing to work for smaller compensation than the white men. Again, they proved to be more reliable. The Chinaman learned to do one thing well. He kept at it so persistently that he became expert, and thereafter would not leave his occupation to attempt something else.

In 1876 this condition of affairs finally resulted in an agitation against the Chinese. This was known as "the sand-lot agitation," so called because it was carried on in a sandy piece of ground near the City Hall in San Francisco. At this place inflammatory speeches were made from wagons every night by orators whose persistent demand was that "the Chinese must go." A mass meeting was held in Union Hall in April of that year, and an address was sent to Congress asking relief from "Chinese cheap labor." It was stated in this address that there were 200,000 Chinese in California, of whom 75,000 were in San Francisco. It was further alleged that there were more Chinamen in the State than there were voters; and it was feared that if the ballot should be placed in the hands of the Chinese, California would become in effect a province of China.

In October, 1876, a joint committee of both Houses of Congress went to San Francisco to look into the Chinese question. It was proved by the Custom House records that the Chinese population was 117,331, less the natural decrease by death. According to the census of 1880 there were 105,448 Chinamen in the country. The present Chinese population is not far from 100,000, one way or the other. However, Congress enacted a law prohibiting the immigration of the Chinese, and declaring them ineligible for citizenship. Now, as a matter of fact, the Chinese are not migratory. Migratory people are aggressive, which cannot be said of the Chinese, who are models of patience and forbearance. The Chinese in America come from a few districts in the province of Kwang-tung, in which Canton is situated, from which fact arises the supposition that all the Chinese in this country are Cantonese. Other Chinamen than those from Kwang-tung will not leave the country. The majority of those who have come here are villagers and peasants; but many Chinamen of means and education have come to America to engage in business, and many youths of good family have come to enter schools and colleges.

The popular impression in the Eastern part of the United States is that all the Chinamen in this country are laundrymen. There are, it is true, a great many Chinese occupied in laundry work in all parts of the country; but Chinaman are engaged in a great many other industries,

mainly as laborers, but often as independent proprietors. The Western States represent the greatest and most varied fields for Chinese industry. More Chinese labor is employed in California, Arizona, Oregon, New Mexico, Washington, Montana, Idaho, Utah, and Colorado than in all the rest of the country combined. The migration of the Chinese to the Eastern States has been very slow. The Chinese are exceedingly gregarious. They live together for protection and because they are cut off from other associations and interests. Occasionally a Chinaman will be found in a small Western town engaged in the laundry or restaurant business, if it be very profitable; but as soon as he can he moves to a centre where there is a Chinese quarter and where he has friends and acquaintances.

When the Chinese were driven by the completion of the railroads to seek other work, they were naturally given the meanest employment, such as white men would not take. I have often been asked why Chinamen became laundrymen and household servants. The reason is simple. When they sought work in Californian towns, there were few white women among the inhabitants, and such as there were would not do menial work. The washing of clothes was easily learned, was profitable, and required little capital; the same may be said of cooking and household work. But the Chinese proved in many ways to be great wealth producers for California. In the delta formed by the Sacramento and San Joaquin rivers were millions of acres of reed marshes, called tule lands, of rich alluvial soil, that would grow forty bushels of wheat to the acre. It was very desirable to reclaim these swamps for cultivation; but they were malarial, and it was impossible to get white laborers to work on them. At length the task was turned over to the Chinese. Large contracts were let to one or two Chinamen who agreed to reclaim the lands. They sublet their contracts to numerous little communities of from forty to a hundred Chinamen who were jointly interested. These worked faithfully until more than five millions of acres of fine garden and farm lands, valued at $289,700,000, were added to the wealth of the State. After that many of the men who had been employed in the work bought or rented farms and raised vegetables and fruits on them for the markets.

The Chinese are economists. What the average American will throw away as worthless, because of the industry necessary to turn it into wealth, the Chinaman will make profitable by sheer hard work. Thus, the Chinese went into placer, quartz, and hydraulic mining in the West. They bought "tailings" — that which was thrown away as

worthless after the white miners had washed the gold out — and worked them over with patient industry, taking out enough gold to pay them. They developed considerable aptitude for mining, and profitably worked many worn-out and abandoned mines. They were also employed by miners in difficult work in placer, drift, and hydraulic mining, at good wages; for, while they were not of large frame or very muscular, they were very patient and possessed of great endurance.

In 1885 a law was passed in California requiring every foreigner who was not eligible to citizenship and who wished to mine in the State to take out a license costing four dollars a month. Tax collectors were appointed to gather in this tax, which resulted in many abuses and much extortion. Chinamen were stabbed and shot on account of differences arising between miners and collectors, because neither understood the other, very few of the Chinamen being able to speak English. It has been estimated that the Chinese have added more than $2,000,000 to the wealth of California alone by mining.

The Chinese in America have been very successful in the various farming industries. Most of them being of peasant origin, they took naturally to the soil, of which, by heredity, they were fond. When mining declined they consequently went into husbandry. In California, to which they were originally confined and where most of them have since remained, farming was at first very difficult on account of the droughts, the high rates of wages demanded, and the extreme difficulty of obtaining laborers. In their dilemma the ranchmen turned to the Chinese, who took readily to the business. The difficulty with white labor was that most of it had proved to be nomadic and untrustworthy. Chinamen, on the other hand, become attached to a place, and return again and again to it for employment as laborers, or take up the business in a small way on their own account.

The Chinaman is especially capable as a grower of vegetables and small fruits. In California, and in fact all over the West, the raising of "garden truck" is almost altogether in the hands of the Chinese. A Chinese vegetable farm, usually very small in extent, is a lesson in thorough and careful cultivation. Not even in France or Belgium can such close cultivation be found. Some Chinese gardeners grow the best class of vegetables and small fruits to perfection; employing many men in their gardens and as distributors. In the cities of the far West, vegetables and fruits are peddled from house to house by Chinamen who carry their wares in baskets slung from a yoke and pole on the shoulders. The weight often carried by a pedler is astonishing. As they trudge

along their burden has a peculiar bobbing and swaying motion that is very trying. The pedlers usually have districts in which they have steady customers, and their trade depends on their reliability and honesty. A pedler deals generally with the Chinese cook of a household, and keeps a running account, from week to week, which is written in Chinese characters on the jamb of the kitchen door; the pedler's account being outside, and the cook's inside. At the end of the week, when the account is paid, the inscriptions are scrubbed off. Fish and fruits of great variety and cheapness are sold in the same manner. The Chinese pedler is a boon to the housekeeper, who thus has the freshest of commodities brought to her door.

The Chinese have been a great factor in the development of the fruit and wine industries of the West. They quickly learned how to prune trees and to care for vines. The immense industry of picking strawberries and raisin grapes is almost entirely in their hands; the price for this labor being so low that white laborers refuse to take the work. Without Chinese labor it is doubtful if the fruit ranches of the far West could be carried on with profit. The average pay for a Chinese laborer on a fruit ranch is a dollar a day.

In the manufacturing industries the Chinese have taken an important part. There is hardly a light industry in the country in which they are not employed. In the West they work in woollen, jute, and cordage mills. They make boxes, furniture, candles, matches, brooms, cloths, blankets, flannels, shawls, yarns, and shoes. Manufacturers naturally prefer to give employment to white laborers; but usually these have proved so unreliable that the "bosses" have been driven to employ Chinese. It would be impossible to run many of the industries of California were it not for Chinese labor. When the white laborers proved to be unreliable, Chinamen were taken in hand and were taught the trades. In the early days that State was practically cut off from the outside world, and had to manufacture the things it needed or do without them; and so the Chinese became the artisans.

Among the industries into which the Chinese went were embroidering, for which they showed an astonishing aptitude, and lacemaking, which is allied to it. They also became expert at shirtmaking and at sewing men's clothing. In the powder works nearly all the laborers are Chinamen. A great many are employed in filling cartridges, an exceeding dangerous and unhealthy occupation that kills an ordinary man in two years. Chinamen, as a rule, have great vitality, and this was proved when cartridge-making did not greatly increase the mortality among them.

Besides these industries many Chinese are proprietors of restaurants and coffee houses. They export flour and ginseng to China, and are dealers in all classes of goods, for both American and Chinese consumption. There are Chinese lawyers, doctors, and dentists; and not long ago a Chinese lawyer, educated in London and New York, went to China to become tutor to the grandchildren of Li Hung Chang. In many Western cities Chinese doctors, who advertise extravagantly in the newspapers, do a large business among the credulous Americans. Cigar-making is a trade taken up by the Chinese, to a great extent, in this country and in Cuba. They become very proficient in it, making wages equal to those of white operatives.

Probably the most interesting feature of Chinese industry in this country is the large number of Chinamen who are household servants. The Chinaman makes an excellent servant, and early in the history of California solved the vexed question of domestic service in that State. In San Francisco there were many families who were willing to pay high wages to competent servants. There were few women in the State, and those who went there were soon married. In this extremity, as in many others, the Chinaman was called upon to fill the gap. He learned to cook, to make beds, to dust bric-à-brac, and to care for children. Being deft and cleanly, his value as a servant was soon recognized, and he became an institution. Chinese servants are paid as low as twenty dollars a month and as high as sixty. In some cases, where there is much responsibility, especially in the supervision of other servants, they receive even more. Many of these household servants are young men of good family, and well educated, according to Chinese standards. They undertake this occupation as a means of learning to speak English correctly.

They frequently become much attached to the families they serve, and keep their positions for years. As caretakers of children, a mutual affection often springs up, rendering the servant very devoted. I remember the case of the son of a prominent lawyer in California who had a venerable Chinese servitor who was his most devoted friend and guardian. The boy's mother died about a year after his birth, and he was put in charge of a young and very intelligent Chinaman, as he had no female relatives, and there were few reliable women that could be hired to look after him. The Chinaman cared for this boy as for his own life, forsaking his old friends and associates in his devotion. When the child was big enough, his nurse took him to the Chinese quarters when he went to visit his friends. In the course of time the boy learned to speak the Chinese language, and could read and write it as well. When he

went to college his Chinese servant accompanied him as valet. On account of the facility with which he spoke Chinese, the young man was given responsible positions by manufacturing companies who employed large numbers of Chinamen. He is now a rich man, and his "China boy" is still his faithful servant.

Chinese servants in small families do all the housework. They cook and serve meals, changing their blouses and shoes for the service. They make beds, sweep, and dust, and this done are free until it is time to prepare and serve the midday meal. They work much faster than women, and thus have more spare time. After luncheon and the incidental work of cleaning up, they are free again until it is time to get dinner, after which, if they are not required to serve for an entertainment, they are at liberty to go home. They live among men of their own nationality in the Chinese quarters.

It is the general impression among Americans that the Chinese in this country are parsimonious. This is not the case. The Chinese have earned enormous amounts of money, to be sure, but they have also spent largely. Their savings may be estimated at not more than ten per cent of what they earn, which is very often permanently invested in this country, and does not go to China. Laborers seldom save anything, and this is as true of the Chinese as of other nationalities. In the first place, the Chinaman is usually charged more for what he buys than any one else, and again he is inclined to be a spendthrift when he can. He is an epicure in his own way. He is also fond of silk clothes and expensive shoes. Very often he is a gambler. The actual needs of the Chinaman are greater in this country than in China. The climate in the Kwangtung provinces is so mild that all he requires at home is a thin cotton blouse and trousers, and two extra garments for winter. His hat is of roughly plaited straw, and he wears straw sandals. In this country, he must wear woollen underclothing, a felt hat, and leather boots, if a laborer. His boots in America cost four or five times as much as his whole outfit in China.

The food bought by the Chinese is often quite as expensive as that of the whites. Instead of living almost altogether on rice and chop sooy, as is the general impression, Chinamen, being quite as fond of meat as Americans, buy pork, beef, and chickens. Chop sooy is made to sell to curious white persons who visit Chinatown. In the vicinity of every large city where there is any considerable Chinese colony there are truck gardens devoted to raising vegetables exclusively for Chinamen from seed brought from their native land. These vegetables are unknown to Amer-

icans. But the Chinese also consume large quantities of the finer kinds of American vegetables. The Chinaman has a sweet tooth also; and in the best Chinese restaurants in San Francisco, New York, Chicago, and other large cities, the best of wines are served to Chinese as well as American customers, together with the finest and most expensive foods. In the average Chinese restaurant in those cities good board can be had by the Chinese for from fifteen to twenty dollars a month, and these restaurants are largely patronized. As a rule, the Chinamen are compelled to lodge in mean quarters; but in New York and San Francisco there are a number of well-appointed homes, occupied by the families of well-to-do Chinese merchants, which the American seldom or never sees. In New York there is an apartment house, up-to-date in every respect, occupied by Chinese families. The Chinaman sticks as closely as he can to the traditions and customs of his country, which are strange to the Occidental and, therefore, a subject for comment and often for derision.

There are not many rich Chinamen in America; but some of them are very well off, with fortunes ranging from $100,000 to $500,000. There is one multi-millionaire, Chin Tan Sun, who is the richest Chinaman in the country. Chin Tan Sun owns whole towns, and employs hundreds of white men and women in his factories and canneries. He owns ranches, city real estate, gold mines, and diamonds; he runs lottery games; he imports laborers; he conducts a real estate business; and he has several merchandise stores in San Francisco. He is a self-made man, and very shrewd and progressive. He came to America in the steerage as a lad, and went to work in a kitchen. He married a white woman, and with their savings they originated a "little lottery" business in San Francisco. He was largely patronized by Americans, and soon grew rich enough to become a merchant also. From this beginning he developed into a commercial and political power. He is called "Big Jim" on account of his size. He is six feet tall, and a well-proportioned, good-looking man. In business he is regarded as the soul of honor. His wardrobe is magnificent, and several valets are needed to care for it.

There has always been a great deal of misinformation in this country with regard to the Chinese "Six Companies." As a matter of fact, these are simply associations of Chinamen from six districts in the Kwang-tung province of China. The Chinaman belongs to the company named after his district. The Six Companies are named as follows: Ning Yeung, Yung Wo, Sam Yup, Hop Wo, Kung Chow, and Yan

Wo. They are mutual aid societies or guilds rather than anything else. It has been stated that they are virtually slave concerns; but this is not true. Their mission is to look after the sick and dead, to write letters for illiterate Chinamen, to advise in business matters, etc. Each company has a president who receives a salary of eighty dollars a month to look after the interests of its members when alive, and to ship their bones back to China when they die.

The native religious beliefs of the Chinaman deal largely with superstitions too complicated to discuss in an article of this length. The spread of Christianity among Chinamen in this country has, however, been steady and successful. There are now one hundred Chinese missions being conducted by the Baptists, Methodists, Presbyterians, Congregationalists, and other denominations. It would be difficult to estimate the exact number of converts made by these missions. As a rule, the Chinese who attend them are earnest in their endeavor to understand and embrace Christianity.

SUNYOWE PANG.

## THE RAKE'S PROGRESS IN TARIFF LEGISLATION.

In all cases of alleged corruption or maladministration those who are in control of government functions contend that the best way to secure reform is to effect it from within the ruling party. In this way the party which has succeeded in making the high tariff identical with its own *raison d'être* has advanced the claim that tariff reform ought to be effected by the friends of the tariff. This, of course, is expecting that the wolf will lay aside his desire for lamb, and the fox his appetite for poultry, and that these animals will give up life in the forest to become well-behaved denizens of the civilized precincts of the barnyard. The good intentions and reformatory resolutions of Reynard the Fox became wrecked at his first sight of a fat goose after he had started on his pilgrimage to Rome.

The Republican party in its early days had no high tariff propensities. In 1857 the first Republican House of Representatives lowered the so-called "free trade" tariff imposed by the Democratic Act of 1846. The ensuing war made successive increases of duty rates a necessity. Protection was at first an incident. The protective character of duties on goods was largely offset by internal taxes on domestic merchandise. When revenue had become redundant, countervailing internal taxes were reduced or entirely abolished. The Republican party was quite sincere in its promise that the tariff rates should be reduced to conform with the condition created by these changes. In fact, a reduction of 10 per cent was enacted by Congress in 1870. Men like Garfield and John Sherman repeatedly declared themselves to be seeking free trade along the road of protection.

But, like Reynard, they never got very far in their pilgrimage. The tariff goose was too seductive a morsel. The 10 per cent reduction was soon removed, and the unabated war tariff was permitted to continue. The demand for tariff reform raised by the consuming classes was supported by manufacturers, who felt themselves aggrieved by heavy burdens on the materials consumed in their manufactures. Mr. Arthur

and his Secretary of the Treasury, Mr. McCulloch, were outspoken advocates of reform. Congress created a commission to investigate. The report of this commission recommended a substantial reduction. The commission also submitted a tariff proposal which in many respects was the embodiment of the very opposite of the liberal spirit shown in the body of the report. Congress took the hint from the skilled hand that drew the report, and passed the Act of 1883.

The act reduced some duties by 5 to 10 per cent and raised others correspondingly. It raised the tariff on works of art from 10 to 30 per cent, undoubtedly to give force to the desire of a member of the Tariff Commission from West Virginia to exclude "the Dutch daubs" and give a chance to our native talent. The ad valorem duty of 10 per cent on raw wool was taken off, and the specific part of 10 and 12 cents, respectively, per pound was retained. But between 1864 and 1883 foreign wool had fallen. The same duty is, therefore, relatively much higher under the later tariffs than it was under the war tariffs. In iron and steel the onerous duties, which were mostly specific, were not greatly abated. The general decline in prices, due to improvements in the economy of production, made these duties proportionately much higher than was their rate at the time when they were imposed. Manufactures of iron and steel, "not otherwise provided for," including machinery, etc., were raised from 35 to 45 per cent.

The people could not be hoodwinked as easily as the reformers from within had imagined. In 1884 a Democratic President was elected on a determined tariff reform platform. Mr. Cleveland's endeavors were unavailing, owing to the presence of a hostile Senate; and in 1888 the task of tariff reform was again delegated to the party of reform from within. The promises were carried into law by the McKinley Act of 1890, which, as everybody knows, was a heightening, not a lowering, of duties. This playing fast and loose with solemn ante-election promises to the people again brought its measure of retribution in 1892. Mr. Cleveland took up his duty in his own determined way. By forcing the repeal of the Sherman Silver Act of 1890 — the twin sister of the McKinley Act — by a reluctant Senate, convened in extra session immediately after his inauguration, he paved the way to the consideration of tariff reform in the regular session of Congress in 1894.

The Wilson tariff gave the long-desired relief. That it did not prove as successful as would have been the case had it outlived the time of depression ushered in by the silver panic is due largely to the fact that it was a compromise. It retained duties on important raw materials,

coal, and iron ore, and made the duties on yarns and other intermediate materials too high.[1]

President McKinley could not have been elected but for the votes of gold Democrats, who were to a man either free traders or low tariff men. Immediately on his inauguration he called an extra session of Congress to reform the tariff. The enactment of a currency law, urgently needed to create a staple basis on the gold standard, was relegated to a later period. The party of friends of the tariff produced the Dingley tariff. It restored the McKinley tariff rates generally, and in many instances, by substituting specific for ad valorem rates, increased them substantially.

The restoration of the provisions of the McKinley tariff rates on wool, woollens, and worsteds is the chief gravamen against it. The manufacturers were urgent in their demands for higher duties. They have now the same substantial rate of 50 per cent on woollen fabrics and worsteds as they had under the Wilson Act; but, besides this, they have the additional protection of nearly twice 11 cents on a pound of manufactured woollens. Wool in the grease pays 11 cents a pound duty. But the wool chiefly employed in woollen and worsted manufactures is of light shrinkage, and little more than two pounds of it are consumed in the manufacture of a pound of cloth, while the tariff allows a compensatory duty of four pounds to the pound of cloth. Crossbred wools shrink even less. A hundred pounds in the grease yield sixty-five pounds scoured, instead of the theoretical twenty-five pounds which the Dingley Act provided for in the compensatory rate of protection against the duty on raw wool. The tariff yields, therefore, to the manufacturer a protective measure of an average of 75 per cent, free of all burdens on his wool.

The burden to the consumer is, however, much greater. I shall show its nature by applying the rates to a few articles which are considered representative by the trade. The custom-house value of a 56-inch English diagonal cloth made of crossbred wool is about 48 cents a yard, the weight being 16 ounces. The ad valorem duty of this is 50 per cent, and the specific duty 44 cents a pound. Hence 48 cents' worth

[1] See "An Unwritten Chapter in Recent Tariff History," in THE FORUM for July, 1900. The present writer, who had been deputed by the Secretary of the Treasury to assist as an expert the Senate Finance Committee in its tariff work, opposed these high duties. This called forth the most bitter attacks from the corporations and their agents. They were bold enough to demand, and powerful enough to obtain, duties of a height that made it impossible for manufacturers, who had to buy their yarns from them, to compete with concerns that were producing the finished goods from the raw material up.

of cloth pays 68 cents in duties. An article like this, made of all wool, leaving the English factory door at the price of 48 cents, costs the importer, after paying duty and expenses, fully $1.25 net. The duty is equal to 142 per cent.

A similar cloth made of merino (Botany) wool, shrinking 50 per cent in the scouring, costs about 56 cents net. The duty is the same as in the previous case—to wit, 50 per cent ad valorem and 44 cents per pound — and adds 72 cents to the cost of the cloth. This cloth, leaving the mill door in or near Bradford at 56 cents net, costs the importer $1.28 when he receives his permit for withdrawal from the custom-house, and $1.35 after his other charges have been added. The duty is equal to 129 per cent.

If the goods were cotton mixed, *i.e.*, if they had a cotton warp and wool filling, they would be worth 1s. 8½d. They might come just above the line of division of 40 cents, in which case they would have to pay the rate of 4 × 11 cents and 50 per cent duty. The duty would then be 64 cents on 40 cents' worth of cloth. It is doubtful whether much over one pound of wool is consumed in a pound of this cloth. The total duty would be equal to 160 per cent. The cloth would cost $1.04 by the time it left the custom-house. Of course, goods cannot be imported either at 160 per cent or even at the lower rate of 130 per cent, which would be applied if they cost less than 40 cents.

These rates are imposed on worsteds, which usually show on the face what is their quality inside. But there are numerous articles, going under the name of woollens, which are chiefly cotton prepared in such a way as to deceive everyone who is not an expert judge. An article like this was recently imported for golfing suits. It weighed 20 ounces, cost 24 cents in England, and paid duty at the rate of 33 cents a pound and 40 per cent ad valorem—in all 53.45 cents. This meant a total duty of 223 per cent. The goods had to bring 88 cents in order to pay a moderate profit to the importer. He sold the one case, which he had to pass through the customs, at 55 cents — the price at which similar American goods were sold — and shipped back to England the remainder that had been kept in bond.

Moireens are made of the wool of the black-faced Highland sheep. The wool costs now 4¼d. a pound, and is of very low shrinkage. Costing under 12 cents a pound, and being classed with carpet wools, this wool pays 4 cents a pound duty. The goods made of it, however, pay duty at the 3 × 11 cent rate, plus 40 per cent ad valorem; equalling 132½ per cent on the value of the goods, which is 6d. the yard.

A 44-inch black Orleans, used largely for ladies' dresses and not producible here, costs in England 8⅛d. per yard. The warp is cotton, and the weft of lustre wool, with but a small percentage of shrinkage. The duty is paid on the basis of 7 cents a square yard and 50 per cent ad valorem. The goods are retailed to the consumer at not less than 62½ cents the yard, or four times the price charged by the English manufacturer.

Italian cloths and serges are the most favored linings for men's wear. Serges weighing a trifle over 4 ounces to the square yard have to come under the same rate of duty as cloth, namely, 44 cents a pound plus 50 per cent ad valorem. These, as in the former instance, have a cotton warp and a worsted face. The wool is crossbred wool, shrinking 35 per cent only. Hence it takes little more than one pound of wool to produce one pound of this cloth. The protective part of the pound duty remaining to the domestic manufacturer is therefore about 30 cents, plus the additional duty of 50 per cent ad valorem. The foreign price of a popular quality is 6d. a yard. On this the duty, at 44 cents per pound, is about 10 cents a yard, the goods being 32 inches wide, and 50 per cent ad valorem, making a total of 16 cents. The goods cannot be landed at the importer's door at less than 30 cents a yard, net. Under the Wilson tariff of 50 per cent ad valorem the importer was able to sell them at about 25 cents; at the present time he would have to ask 37½ cents, or more than three times the English price, to obtain a similar rate of profit.

It is needless to say that importations of such goods are almost impossible. The duty is practically prohibitive. It might as well be 1,380 per cent as the present 138 per cent. The benefits of the impost are reaped by one manufacturing concern. This company is at present unable to meet the demand. It sells its goods at 26 cents a yard, a formidable reduction from the importing price, and has declared dividends of 100 per cent. We must admire its moderation in view of the amount it could collect if it were willing to charge as much as the tariff invites it to charge. It is right, perhaps, in taking the advice of the Greek philosopher Thales, who said that "moderation in all things is good." The people have not shown so much willingness to pay more than the prices that were established in 1895 and 1896 under the Wilson tariff. They are forced to wear clothes of shoddy and cotton, and to use polished cotton satteens as linings to replace these excessively protected materials. Hence it may, perhaps, be wisdom born of a shrewd consideration of the enduring capacity of the market that forces this moderation on the com-

pany previously mentioned. But this again proves forcibly the excessive character of the tariff.

That the people do not resent these impositions for the benefit of a favored few is due to the fact that the dealers have endeavored to maintain the prices established under the Wilson tariff. The immense importations of wool and of woollen fabrics which anticipated the passage of the Dingley tariff in 1897 made it possible at first to respond to the public refusal to pay the prices resulting from the new act. In response to this public refusal the shoddy and cotton substitutes have become such active factors in the market that they have crowded out all-wool goods, so much so that but few of these appear now in the people's clothing. Issachar is not an expert judge of goods, or at best he cannot help himself; he has to buy what his purse can afford. That his clothes bag at the knees and elbows, wear white at the seams and edges, and require renewal twice as fast as good, sound, all-wool clothes, the wear of his wealthier brethren, cannot be helped by him, and is certainly too trifling an incident to concern the lawmaker.

The effect on the wool raisers has been as disheartening as on the manufacturers of all-wool goods. They are far from reaping the full harvest for which they made such ample preparations. With respect to woollens we are now the worst provided people among the civilized nations. It was shown in the article previously referred to that the consumption of wool per capita, exclusive of carpet wools, averaged 7.55 pounds from 1884 to 1886, and only 6.3 pounds under the higher rates of the McKinley tariff. Under the Wilson tariff the ratio was 8.2 pounds, while the average from 1897 to 1900 sank to 5.9 pounds. In the year 1900, the consumption was 4.8 pounds only. It was shown at the same time, and on the same basis of computation, that Germany's consumption, which in 1885 was 5.36 pounds only per capita, had risen by 1898 to 6.59 pounds.

The year 1901 shows a further decline. While our wool production has been but slightly increased, importations of clothing and combing wool have fallen off, and so has the importation of manufactured wool. The rate of present consumption is but 4.5 pounds. To this allowance every inhabitant of the United States has been reduced under the Dingley tariff, while under the Wilson free wool tariff it was 8.2 pounds, which may be accepted as the normal ratio of consumption when wool is free from taxation. In this light a tax on wool can safely be called a tax on health.

It is unnecessary to say much about the excessive rates on other

merchandise. When the labor cost of turning raw materials into articles of use has become so cheapened by the employment of well-fed and well-conditioned working people and the introduction of labor-saving machinery that the manufacturing nations of the Old World begin to organize in self-defence against our cheap products, words fail to express adequately the wantonness of the excessive burdens which are maintained under the hypocritical cry of protection for labor.

In many instances, by tariff taxes on raw material, we prevent our manufacturers from reaping the full benefit of their superior outfit. We tax hides 15 per cent. The tanner exporting the leather receives a drawback from the Treasury. The manufacturer of shoes has to pay the duty, however, in the leather he consumes. Thus the English or Continental shoemaker is able to meet our shoes in his market with American leather, which he has bought at a considerable reduction from our home prices. Hides were free from 1872 to the time of the Dingley tariff, which has gained for itself the distinction of having put a tax of 15 per cent upon this article. The protection of the farmer was the ostensible boon sought. But the benefit he receives from this is the chaff. The grain is gathered by the meat trusts and the slaughtering houses.

The iron and steel corporations are another example of the tenacity with which overgrown and tariff-fattened industries cling to the benefits they have been able to obtain from an always willing Congress. From the raw iron to the finished machine they produce according to their own statements at less cost in labor than the most advanced competing nations can do. Still they insist on the continuance of the whole of the bountiful protective rate.

Tariff reform by the friends of the tariff will not be found easier to obtain in the future than it has been in the past. The forward step it has taken under their hands in the last thirty-five years may be seen from the table, appearing on the following page, of the rates on some of the leading articles, arranged in alphabetical order. In this table I have given the ad-valorem duties. The pound-weight and square-yard duties which from time to time have been substituted for ad-valorem duties in the various subdivisions of the tariff schedules show much higher rates. The silk tariff, for instance, was changed to a specific tariff in 1897, with the additional proviso that no duty should be lower than 50 per cent. The specific rate was particularly directed against Japanese and Chinese silks. The latter are now nearly all excluded. The former are of very fine texture. They are made of very light silk

THE AD VALOREM TARIFF RATES UNDER THE VARIOUS ACTS FROM 1863 TO 1897.

| | Act of 1863. Per cent. | Act of 1867. Per cent. | Act of 1883. Per cent. | Act of 1890. Per cent. | Act of 1894.[1] Per cent. | Act of 1897. Per cent. |
|---|---|---|---|---|---|---|
| Cotton manufactures.. | 35 | 35 | 40 | 45 | 35 | 45 |
| " embroidery and laces ..... | 35 | 35 | 40 | 60 | 50 | 60 |
| " hose, fashioned. | 35 | 35 | 40 | 35–75 | 30–55 | 55–75 |
| Flax manufactures.... | 35 | 40 | 35 | 50 | 35 | 50 |
| " thread and yarns.. | 30 | 35 | 40 | 45 | 35 | 35–50 |
| Iron and steel manuf.. | 35 | 35 | 45 | 45 | 35 | 45 |
| Leather gloves ..... | 40 | 50 | 50 | 50 | 45 | 50 |
| Jute manufactures.... | 25 | 30 | 35 | 40 | 35 | 45 |
| Leather..... | 25 | 25 | 20 | 20–30 | 10–20 | 35 |
| " manufactures. | 35 | 35 | 30 | 35 | 20 | 35 |
| Painting and art-work. | 10 | 10 | 30 | 15 | Free. | 20 |
| Silk, organzine..... | 25 | 35 | 30 | 30 | 30 | 30 |
| " manufactures ... | 40 | 50 | 50 | 50 | 45 | 50 |
| " manuf. up to.... | .. | .. | .. | .. | .. | 90 |
| Wool, clothing wool.. | .. | 11 | 11 | | | |
| " pound duty.... | .. | and 10 cts | and 10 cts | 11 cts. | Free. | 11 cts. |
| Worsted manufactures. | 50 | from 20 cts. lb. and 35%–40 cts. lb. and 35%. | from 12 cts. and 35%–35 cts. and 40%. | from 33 cts. and 40%–44 cts. and 50%. | from 40% to 50%. | 33 cts. and 40%–44 cts. and 50%. |
| Woollen manufactures. | 18 cts. and 30%. | 24 cts. lb. and 40%. | 35 cts. lb. and 40%. | same as | on worsted. | |

on hand looms, and could not possibly be produced in America on power looms by our tearing-away method. The duty is as high as $4.50 a pound on goods "weighing less than one-third of an ounce per square yard." The value per pound of these silk tissues is $4.80, and the duty on them is accordingly equal to 93 per cent ad valorem. Most of the Japanese silks imported are of heavier weight than this, and fall under the clause which imposes a rate of $3 per pound. This is equal to 62½ per cent. Cotton-back satin, as of "not more than 30 per cent in weight of silk," is, "if dyed, 80 cents per pound." The average value is $1 per pound, bringing the duty to 80 per cent ad valorem.

Fourteen years ago I inquired, in an official capacity, into the cost of production of the leading articles of manufacture in Great Britain, Germany, and the United States. My reports showed that, while the wages

[1] To free traders the name of free-trade tariff, bestowed on the Wilson tariff (1894), by protectionists as a stigma, must appear a strange distortion. Were it not for the removal of the barbarous tariff on works of art, the freeing of wool and a few other raw materials, and the consequent lowering of the duties on woollens, little would remain to distinguish it from the other tariffs imposed for protection pure and simple.

here were from 50 to 100 per cent higher, the cost of production was not higher, but in many instances was lower, than in the two leading industrial countries of Europe. Though these reports were doubted and even treated with abuse by Republican senators in a debate in the Senate, their correctness is now no longer open to question. They found corroboration in the investigations undertaken about the year 1890 by the Department of Labor. This evidence showed that, at that remote time, in manufactures where American ingenuity was able to exert itself, there was little need for rates of duties that would not have been as operative in excluding similar fabrics under a rate of 25 per cent as under a 50-per-cent rate. Since then we have cheapened production considerably by means of improved appliances.

Actual conditions speak louder than theories. Our manufacturers are beginning to feel their strength. Foreign producers, erstwhile the dread of our "infants," have now become struck with the *terror Americanus* on the appearance of the newly developed Hercules. The giant wanting to preserve all the privileges of the nursery while he swings his huge arms would be an object for the merriment of the onlookers were it not for the burdens they have to carry to satisfy his greed.

It has been recognized, and admitted in public speech by so orthodox a confessor to protectionism as the late President McKinley, that "we must not repose in fancied security that we can forever sell everything and buy little or nothing." Our late President further said:

> If such a thing were possible, it would not be best for us or for those with whom we deal. We should take from our customers such of their products as we can use without harm to our industries and labor. Reciprocity is the natural outgrowth of our wonderful development under the domestic policy now firmly established.

Reciprocity presupposes a certain equality of duties imposed and privileges conceded. We have been in the habit of speaking of Germany and France as though they were countries protecting their industries in the same way as we protect our own. A comparison of rates of duty on some leading articles will show at once the wide divergence that exists. The duties of Germany and France are weight duties charged per 100 kilograms. I have obtained from importers the custom-house values of the articles we import. By the aid of the values and weights given in the German statistical returns we can establish a basis of comparison with our duties, which are on an ad-valorem basis.

> Wool and Worsted Yarns: The German tariff is 10 marks per 100 kilograms, or 1.07 cents per pound on all grades. The French tariff averages about 100 francs per 100 kilograms, or about 8.7 cents per pound. The American tariff on corresponding

grades is 33 cents plus 40 per cent = 50 cents, the foreign value being taken at 42 cents. Expressed in percentage this is 2½, 20, and 119 per cent for the three countries in the order named.

Worsted and Woollen Cloth: Value, 72 cents per pound. Duties: Germany, 135 marks per 100 kilograms, or 15 cents per pound; France, 140 francs, or 12 cents; America, 44 cents and 50 per cent = 80 cents. This is 21, 17, and 111 per cent, respectively.

Linen Tissues: German value, 54 cents per pound. Duties: Germany, 60 marks per 100 kilograms, or 5½ cents per pound; France, 100 francs, or 8½ cents; America, 27 cents. This is 11, 16, and 50 per cent, respectively.

Silk Tissues, Pure: Value, $5 per pound. Duties: Germany, 215 marks or 100 kilograms, or 25 cents per pound; France, 400 francs, or 30 cents; America, $3. This is 5, 7, and 60 per cent, respectively.

Cotton Embroidery and Laces: Value of German exports to America, an average of 32½ marks per kilogram, or $3.60 per pound. Duties: Germany, 350 marks per 100 kilograms, or 38 cents per pound; France, 1,200 francs, or $1.05; America, 60 per cent. This is 10½, 29, and 60 per cent, respectively.

Cotton Hose: Value, 6.50 marks per kilogram, or 70 cents per pound. Duties: Germany, 140 marks per 100 kilograms, or 15½ cents per pound. This is, Germany, 22 per cent; America, 55 per cent and over.

Locomotives: Value, $250 per ton. Duties, per ton: Germany, 80 marks, or $19.05; France, 180 francs, or $34.74; America, $112.50. This is 7½, 13¾, and 45 per cent, respectively.

Lace Machinery: Value, $780 per ton. Duties, per ton: Germany, $23.80; France, 100 francs, or $19.30; America, $351. This is 3, 2½, and 45 per cent, respectively.

General Machinery: Value of German exports to America, 900 marks, or $214 per ton. Duty, per ton: Germany, $23.80; France, 100 francs, or $19.30; America, $96.30. This is 11, 9, and 45 per cent, respectively.

Boots and Shoes: Value of German imports from America, $1.24 per pound. Duties: Germany 70 marks per 100 kilograms, or 8 cents per pound; France, 29 cents per pair; America, 44 cents per pound. This is 6½, 10, and 35 per cent, respectively.

Leather, other than for Soles: Value of German imports from America, $1.07 per pound. Duties: Germany, 36 marks per 100 kilograms, or 4 cents per pound; France, 50 francs, or 4½ cents per pound; America, patent leather 30 cents per pound and 20 per cent, or 30 cents per pound and 10 per cent, according to weight, equivalent, say, to 45 cents per pound; other upper leather 20 per cent. This is 4, 4½, and 30 to 40 per cent, respectively.

It is plain that we could not gain much trade by reductions of 10 or 20 per cent from duties at present so low that they can barely be called protective in the light of our ponderous rates. A reduction of duties from 5 to 4 per cent, from 10 to 8 or 9 per cent, as in the case of leather and shoes, or from 3, 7, or 11 to 2½, 6, or 10 per cent, as in the case of machinery, would not increase the demand for our goods. A lowering of rates to the same extent might be felt, however, where duties of 35 and 45 per cent are in question, and these are the minimum rates in our tariff. If these high rates were really required for protective purposes, the concern felt by interested people at the proposed reductions in the pending treaty with France might be excusable. But it has been shown

that our cost of production is now so low that protective rates in most of our industrial products have become practically unnecessary.

It is true that we import large quantities of goods which apparently compete with our own manufactures. The opponents of tariff reduction or of reciprocity arrangements regard the large importations under the name of cotton goods, silk goods, kid gloves, etc., as a proof of the danger that would threaten our industries if the towering structure were lowered even by a few inches. Much ignorance, however, is frequently shown in the discussion of industrial questions and trade matters. Writers know the figures, as they are printed and tabulated, but have not the faintest idea of the material things represented thereby. It thus happens that the most absurd statements are put into print.

The "American Wool and Cotton Reporter," which is freely quoted as an authority in matters pertaining to the textile trades, in its issue of last March called the attention of the trade to the fact that $42,000,000 worth of fine yarn cotton piece goods, which ought to be made here, was annually imported. It advised machine builders to prepare for the coming demand, as, undoubtedly, cotton manufacturers being now made aware of their opportunity would not fail to improve it.

Mr. E. J. Gibson, in his article on "Reciprocity and Foreign Trade" in THE FORUM for December last, is more moderate. He says:

> The imports of cotton goods from all countries similar to those on which reductions of duties are provided for in the French treaty aggregated in value in the last fiscal year about $30,000,000. It is evident that there is no surplus duty there.

Our importations, however, in articles covered under the cotton schedule consist of goods which have no resemblance to what we produce here. These goods will be imported in equal quantities, perhaps, whether the tariff be raised or lowered. All the stimulus given by increases of the tariff has not enabled us to produce embroideries, laces, cotton velvets, fine fabrics and prints, fashion goods and trimmings, or regularly made hose and hosiery of such a quality that a refined taste would not reject them.

The goods to the value of $40,232,782 imported in the fiscal year 1901 under the name of "manufactures of cotton" are composed of the following items: Cloth not bleached, dyed, colored, or printed, $196,898; cloth bleached, dyed, colored, or printed, $5,919,707; clothing and other wearing apparel, $1,528,816; knit goods, $5,461,704; laces, edgings, embroideries, etc., $20,234,466; thread and yarns, $1,746,721; all other cotton goods, $5,144,470.

Not one of these classes touches any of the manufactures turned out by our looms, knitting frames, dye houses, or print works. The total imports of cloth are worth approximately $6,000,000, about three fourths being composed of fine colored and printed fabrics, and one fourth of white fine yarn goods, which by their evenness of texture and softness of finish recommend themselves, as do the colored goods, to the developed taste of our shopping critics. You may induce them to purchase goods of American make by the roundabout means of higher technical and artistic development in production, but not by appeals to their patriotism.

Knit goods are chiefly imported from Germany. The French imports are of trifling amounts, and consist mostly of fine knit underwear, while the German imports are made up of hose and half-hose, fashioned and "regular made," which we have never yet produced satisfactorily. It is out of the question to speak of embroideries and laces as among the possibilities of production by our home industries. Nor can any such assertion be made of what is included under the heading "all other goods." A large proportion of the latter class is composed of velvets, plushes, etc. The rest consists of articles that cater more or less to fashion — *nouveautés*, fancy articles, trimmings, cord, tassels, etc. Imports of articles such as these are increased when times are prosperous, and decreased under reverse conditions.

Similar conditions determine the trade in silk goods. The concern about the reduction of 5 per cent in the proposed treaty is quite unnecessary. The imports of silk goods from France during the calendar year 1900 were valued at $14,360,318. "It is clear," according to the writer of the article in THE FORUM for December, "that these imports would be largely increased by a reduction of duties." A little discrimination would show the unreasonableness of this argument. Of the silk imports from France in the fiscal year 1900, not more than $7,104,208 were dress and piece goods. This amount is composed of goods which are *hautes nouveautés*, or which are imported on account of their higher qualities in finish, color, and design. Their importation depends on fashion and the buying capacity of our people, exclusively. In the three years 1895, 1896, and 1897, *i.e.*, before the Dingley tariff increasing duties on silks through the medium of specific duties went into effect, the average yearly imports in piece goods were but $2,449,000. This shows conclusively that our imports of silk goods from France cannot possibly be increased on account of this paltry reduction. A lowering of duties would have to reach many times the proposed 5 per cent

in order to affect importations in cheap goods. Plain silks and taffetas are produced here at nearly as low a price as abroad. They are inferior in finish and color. A remedy for this would be quickly found if competition with foreign countries drove our manufacturers to greater exertions — a thing not so likely to occur while we persist in the policy of the dog in the manger.

The cut proposed in gloves is 10 per cent. The duty on the class now imported from France is $3.50 per dozen. An abatement of 35 cents would only partly affect the gloves we get from Germany. The French gloves are of a higher class. France, however, could put herself in a position to produce an article to compete with the quality sent to us from Germany, and the reduction granted to her might then injure German trade. But Germany would have to get the same advantages, otherwise she would put into effect Section VIII of her proposed tariff, which will be undoubtedly passed. We cannot incur the risk of having her double all duties against us. The advantage to France of these reductions is illusory. The injury to our glove makers, however, would be as unreal as in the other instances cited. We make men's gloves, and import ladies' gloves. All our endeavors have not enabled us to make a success of the manufacture of ladies' kid gloves, which are imported all the time in steadily recurring amounts.

France has a particular advantage in the manual skill of her working classes, which is apparent in every article produced by individual manipulation. Knowing her advantage she perseveres in her traditional methods. We ought to welcome imports from that country. The aid their example gives us in developing the taste that creates our crude products is of the greatest benefit to us. That the 5, 10, or even 20 per cent reductions proposed could injure the American producer would be regarded as inconceivable, if the relative character of the various products going under the same name were not an entirely unknown quantity in the minds of those who have so far taken part in the discussion of these questions.

The treaty which has given most concern, next to that with France, is that with Argentina. The reduction of 20 per cent in sugar duties would be a gift, pure and simple, to the sugar trust, and would not affect the consumer at all. The case would not be different with the reduction on hides. The benefit would all be reaped by the leather trust. We draw hides from almost every trading country, and most of these countries are in a position to retaliate upon us if we do not extend the same conditions to them all. Any doubts on the subject would be

quickly dispelled by the action of Germany. Sugar and hides stand upon the same level in this respect.

Wool is another formidable subject of contention. But it must be remembered that we do not import from Argentina much of the fine wool which gives our political shepherds most concern. Most of our imports of fine wool are of Australian growth.[1] The reason is simple, though not suspected by the critics. Australian merino wool shrinks from 50 to 52 per cent in scouring; Argentine wool about 62 per cent. The duty, however, is 11 cents a pound, whether four or two pounds of greasy wool are required to produce one pound of clean wool. Reckoning the tariff duty on the basis of clean wool, we have to pay 22 cents duty for a pound of Australian wool and 27½ cents for the same weight of Argentina wool. The reduction would only bring the duty on Argentina wool to the level of that on Australian wool. It would not remove the more desirable qualities inherent in Australian wool. Accordingly, it would benefit neither the American consumer nor the Argentine producer.

Similar strictures may be passed upon the reciprocity arrangements entered into with Barbadoes, Jamaica, and British Guiana. The reduction would affect produce which we import in much larger quantities from other parts of the West Indies, and from South and Central America. The advantages expected to be gained by our consumers would be reaped by our combines of middlemen, and would be neutralized in regard to the present treaty-making countries if all other countries obtained the same concessions by means of reciprocity treaties from us. They certainly have at their disposal the means to secure equal terms.

If we look at the other side of the table, we see the same Barmecide feast spread. Barring 19 articles out of a total of 651 enumerations contained in the French law, we are to receive the benefits of the minimum tariff rates in return for our concessions. This seems to have made a deep impression on those who urge the confirmation of the treaties. A careful examination must lead to different conclusions. I will state briefly the chief obstructions in the path of our glorious expectations: (1) There is no minimum rate on breadstuffs, and none on provisions such as France draws from us, like lard, salted or other hog products, etc. (2) In textiles only cotton fabrics of the heavier class are exportable by us. But on these the French duties are prohibitive, and would be so no less were the duty that is of an average of 50 per

[1] In the fiscal year 1901 the imports of class I wool of Argentine growth were 3,886,376 lbs., and of Australasian growth 22,570,030 lbs.

cent reduced to average 40 per cent as the minimum tariff prescribes. (3) Copper and petroleum cover a great part of our dutiable imports by France. These, however, like articles mentioned above (1) could scarcely be imported from other countries. In copper, aside of the question of procurability, exports would scarcely be depending on a reduction in the French duty, now equal to $1\frac{1}{8}$ cents a pound, to one of $\frac{9}{10}$ cent, the minimum tariff rate. (4) On manufactured articles, which we are able to export, iron and steel manufactures, machinery, etc., the duties are so low, as has been shown above, that reductions given by the minimum tariff are not of sufficient weight to incline the wavering balance to the side of American would-be sellers.

In saying this I have practically dealt with the whole subject of the other pending treaties also. In some of these treaties we even find now put on the free list articles which have already been there for a long time preceding the reciprocity arrangements. Of this character are implements and tools of agriculture; machinery for mining; apparatus for generating, storing, and conducting electricity, etc. Further, we see duties reduced on goods which could not by any possibility be imported from any other country than the United States. It would be a waste of effort to go into particulars concerning these still-born treaties, even had I the space to do so.

Summing up the matter, we find that the fox invites the crane to a symposium served by him in flat dishes, and the crane retaliates by a feast to the fox served in high jars with narrow necks. The treaties deserve the disdain which they have met. To the reformer, looking for an abatement of burdens, they certainly offer no single feature recommending them to his consideration. They were meant to serve as a sop to Cerberus. Cerberus wants none of it. The party which has descended from its ideals, and become the instrument of trusts, manufacturers' combines, and promoting jobbers, cannot be trusted with a reform which would affect the fortunes of its patrons. The mission belongs to a party which is not hampered by traditions and obligations.

JACOB SCHOENHOF.

## OUR HONOR AND CUBA'S NEED.

WHEN General Wood went to Cuba as military Governor he was not at liberty to ignore the course which had been marked out, for better or for worse, by his predecessor. General Brooke had initiated there a policy for the military government of the United States. Moreover, the political situation at home must be taken into the account. The interests of the Republican party demanded the preservation of order in Cuba, at least during the presidential campaign of 1900. A common belief is that, but for this consideration, the Constitutional Convention would not have been summoned at such an early date, the plain fact being that the Cubans were not prepared to take this most important step. It is at least probable that General Wood's hand was forced by instructions representing the best opinion which could be formed at that time in regard to Cuban tendencies and conditions.

Therefore the question of the responsibility of individuals for certain mistakes need not be considered in the present article. My purpose is to point out the opportunity for well-doing in the most important particulars. But one must refer to capital errors with emphasis whenever it is necessary to show them so plainly that there can be no possibility of further misunderstanding. These are things which a warm friend and supporter of the Republican principles trusts that the present Administration will correct, and he will even assume for a moment the standpoint of an unfriendly critic in order to represent views to which our future course should lend no support whatever. An unfriendly critic, then, might say:

By all means let us make such concessions to the Cubans in the matter of the tariff as may be necessary to satisfy them for the present. Shall we say fifty per cent off for all Cuban products imported into the United States, or shall we carefully study the tariff, article by article, and decide in respect to each article what duty will best serve to harmonize the interests of both countries? Really, all such questions of detail are unimportant, because the arrangement is not destined to continue for any great length of time, as the concessions alluded to

will be certain to bring about the annexation of the island to the United States.

There is bitter need of financial assistance for Cuba at present. That fact seems to be so generally understood that I need not analyze the conditions which occasion the distress, or give particulars of them beyond the statement that we have driven the Cubans to the verge of bankruptcy by maintaining our tariff against their products while the planters have been struggling to recover from the effects of the war and to overcome certain difficulties which were the war's legacy. We take advantage of this anxiety; we secure as an immediate return for our tariff concessions much more gratitude than an unembarrassed people would accord on receipt of such favors.

So far, so good. Now mark the sequel. We take pains to satisfy these poor creatures; we really and fully satisfy them. We can afford to err on the side of generosity for a while. Let them enjoy such discrimination in their favor that the island may suddenly become more prosperous than ever before in all its history, so much more prosperous that there cannot be the slightest doubt in the mind of any Cuban that a close relation with her great and good neighbor was what Cuba had always lacked in the past, and what she must always maintain in the future.

It will do no harm at this point in the progress of affairs to let the affections of the people of Cuba attach themselves to our country; for they have hearts, too, it is said, as well as the best lands for raising sugar and tobacco. At least, in a population of one and a half millions, it is safe to assume that we shall find quite a number of warm hearts capable of gratitude. Until they are quite wedded to their new-found prosperity, and are as fond of us as we have the right to expect, we shall do well to say nothing to alarm or injure the sensibilities of those who have so recently fought for "independence or death." In fact, we shall never suggest the propriety of annexing the island; but on the contrary it will be more chivalrous and more effective if we suggest to them that they take their freedom — such freedom as we promised them in 1898. At the same time we shall offer to give up our authority, and "to leave the government *and control* of the island to its people," as we said in our Joint Resolution in April of the year just mentioned.

Naturally, quite naturally, we shall attach one small condition to this grant of freedom: we shall withdraw the tariff concessions — that is all. The Cubans — as we shall be able to point out to them — could not expect us to continue to discriminate in their favor, by making spe-

cial rates, after the island had ceased to be dependent, for their agricultural products which compete with our own in the markets of the United States. And we may be confident that meanwhile the Platt Amendment, made a part of the Cuban Constitution at our bidding, will have accomplished all that we expected of it, in the way of absolutely preventing Cuba from gaining genuine independence. Let us realize and keep steadily in mind the situation which I am now anticipating. We shall in effect say to the Cubans: "You may even amend your Constitution by omitting the articles of the Appendix which make you our wards. You are to be free as air; and, incidentally, you will be ruined." Now, it is to be anticipated that the Cubans will hesitate to accept complete independence upon such terms; that they will have become somewhat "spoiled" by our commercial petting; that the ease and comfort of dependence will have won upon them, the habit of dependence becoming fixed.

But then we shall have to go farther. When a grown man takes a child from the beach out into deep water in order to teach it the art of swimming, the child clings timorously to its instructor; and, especially if there is any affection between the two, it may become necessary to cast off the hugging little arms by force. In the case of Cuba, when we shall say in a tone not to be mistaken that we will carry her no longer, that the time has come for her to sink or swim alone, we, not really wishing to let our prize go, but meaning to justify our policy of retention, shall only need to make sure that she, a beginner in the art of self-government, feels the reimposed tariff dragging her down like a leaden weight, and knows that she has been taken out far beyond her depth.

And now let us see what may fairly be alleged with regard to a special variety of blundering which has been characterized as "profitable." The Cuban Conservative party, once called Autonomist and more recently Union-Democratic, figures as the victim of such a blunder. That element of the island's population which comprised the families of intelligence and wealth was in 1898 friendly to Spain and opposed to the insurgents. It was assumed by those who represented the authority of the United States in Cuba after the termination of hostilities that the work of reconstruction might go on without the aid of such Spanish sympathizers, that is to say, without the coöperation of the best people of Cuba. "A natural conclusion," does one say? It so closely resembles a natural conclusion that it served admirably as a pretext. But, while we are speaking quite frankly, let us look below the surface to discover the motives which inspired the Conservative element.

These Conservatives, being people who had much at stake, favored the power which stood for the maintenance of order, whatever that power might be. Thus, they were for Spain as against the revolutionists, so long as Spain represented the established order of things under which they had prospered. Loyal Spaniards, determined to stick to the flag through thick and thin, they most positively were not, as a class. Cynics they were and are in respect to the sentiment of loyalty to a flag. They were not Conservatives because they were Spanish, but were Spanish sympathizers because they were Conservative. Adherents of Spain while Spain represented stability, they became the most reliable adherents of the United States when our Government alone stood between them and the future of perilous experiments proposed by the war party, which had split into the radical Republican and Nationalist parties, largely composed of people with nothing to lose and everything to win. Splendidly disinterested patriots these Conservatives certainly were not; but they would have been our natural allies if we had aimed directly at building up an independent Cuban Republic through native ability. They formed the element which alone had shown real ability in the works of peace.

Our first military Governor gave the civil offices to members of the war party. Our second military Governor did not avail himself of the services of respectable Conservatives when he was preparing for the Constitutional Convention. If he had done so a practicable constitution might have been made. The reader who takes the trouble to compare the text of the "Constitution of the Republic of Cuba," which bears date February 21, 1901, with the "programme" of the Union-Democratic party, adopted December 20, 1900, will quickly perceive the difference between the shabby work actually turned out and the product of intelligence which might have been secured. If General Wood had enlisted the best Cuban talent the Cuban Republic might have learned to swim alone!

Here we may as well take into account a phenomenon which may always be observed in every part of the world after there has been an uprising of lackland, turbulent, adventurer-led folk. The noble cry of *pro patria* is sure to be vulgarized; the very word "patriotism" becomes, through its misuse, a thing to loathe. One of the gentlemen of Cuba cries:

> We do not claim to be patriots. Instead, we declare imphatically that we are not. The mantle of "patriotism" has covered all the swindlers in the country; with it the rascals try to blind those who watch them, and to dessemble the moral enormities

which they commit, dragged into the mire as they are by their lusts, and at the mercy of their ambition. If patriotism consists in making one's-self the accomplice of political adventurers in plots and frauds, and in applauding the stupidity of the ignorant, and the puerilities and absurdities of foolish and vain persons; if to be a patriot one must pay homage to the loud-mouthed demagogues who mount to the highest positions by deceit and lying, and worship idols of clay which the simplicity of the populace.places in the most important public offices, we, for our part, shall say resolutely that we are not patriots, nor do we wish to be patriots, and patriots we shall never become!

These gentlemen of Cuba, as I have said, are cynics in all that relates to national loyalty; so we need not stop to comment upon the pathos underlying this declamation.

The people who were not noisy "patriots," but just respectable Cubans, had the ability to plan a constitution which would have been adapted to the particular needs of the island. In spite of official discouragement, they did actually publish a document which approximated to the American Constitution in its spirit much more nearly than does the work of the Cuban Constitutional Assembly. For example, it conceded to provinces and municipalities home-rule in all concerning local affairs; whereas under the centralizing constitution actually adopted, the President is authorized to meddle in purely local matters to such an extent that it is rather hard to see what can prevent an ambitious man in that office from making himself an absolute ruler. Before long we may be saying that this constitution creates a despotism disguised as a republic.

The Conservative element, then, was not utilized in the American plans because, having been attached to Spain, it could with a show of reason be denounced as hostile to the Americans. The task of building up was confided to Republicans and Nationalists — to the war-party which had shown a talent for nothing but tearing down. Blundering, this, but most profitable blundering. An assembly was secured that had not the talent to devise a fundamental law in conformity with which the Cuban people could work out their own salvation; or, to recur to the figure already employed, the novice in swimming was thus practically compelled to continue clinging to the instructor.

I may pass lightly over the story of our broken promises, because some of its main points were contained in an article on "The Work of the Cuban Convention" which was contributed to this periodical last June. It will be recalled that the McKinley Administration secured the assistance of the fighting Cubans by giving them the assurance contained in the Joint Resolution; that the delegates to the Constitutional Convention began their labors, such as they were, relying upon assurances that the proper relations between Cuba and the United States would

be "formulated" in accordance with their own opinion, instead of being dictated from Washington. Add that the articles in the Appendix to the Constitution which debar Cuba from making treaties, contracting debts, etc., were forced upon delegates who did not truly or adequately represent the people, and whose election had been secured by gross frauds. Nevertheless, the entire population of the island is bound by the action of those thirty-one delegates — incompetent persons, irresponsible adventurers, with but three or four taxpayers in the entire assembly. All Cuba is bound to the United States by the Platt Amendment, in a relation of dependence which liberal tariff concessions will make a permanent condition. Give, that one of the most valuable islands in the world may be given unto you.

The only danger is that President Roosevelt may spoil this fine little game in Cuba. If he gets at the very truth of these doings, he will insist upon righting whatever he finds to be wrong. Some one may secure his attention by saying: The more intelligent Cubans believe that our course in Cuba has been thus and so, and that this course is characteristic of our nation. By their manner, even, they show that their minds are filled with insulting misinterpretations of our motives — the motives of individual Americans and of the people as a whole. They believe that we have been guilty of a breach of good faith in our dealings with the Cubans. It remains for us to reject all the supposed benefits of any policy which is not raised high above the reach of unworthy suspicions; to reassert the intention of a truth-speaking and faith-keeping people to let the Cubans decide for themselves whether they will be free and independent or will prefer without constraint to enter into relations with us which confer upon the United States the privileges and obligations of a guardian, trustee, or protector.

The present phase of the Cuban problem has been admirably stated in that part of the President's message which invites the attention of Congress "to the wisdom, indeed the vital need, of providing for a substantial reduction in the tariff duties on Cuban imports into the United States." Next in order may come the question, What shall be done about a constitution so strangely made by delegates who were not representative, not very intelligent, and not quite free? But underlying these, and more important than either of these, is the question, When shall the elements of real strength in the Cuban population be called into the public service?

MARRION WILCOX.

## MR. HOWELLS AS A CRITIC.

"In these latter days there is no artist who is not also a critic," so Turgenef once wrote to Flaubert; "in you the artist is very great, and you know how much I admire him, and love him; but I have also a high idea of the critic, and I am very happy to have his approval." It was in a private letter that the French novelist thus expressed his favorable opinion of the Russian, for neither of them was ever an open practitioner of the art of criticism. That they both kept for their friends their final convictions as to the true aim of the modern novel and as to the degree of success with which this ideal had been attained by one or another of their contemporaries and predecessors, and that they both refused resolutely to discuss in public the principles which underlie the fascinating craft of the story-teller — this reserve was very likely advantageous to the reception of their own works, since each of these was taken for what it was, and it was not required to be an exemplification of any theory which its author might have set forth in analyzing the narratives of some other novelist. This reticence from criticism had the further advantage for Flaubert and for Turgenef that they avoided arousing against their own books the noisy animosity of the ardent admirers of every dead and gone novelist, whose fading pages they might, perhaps, have failed to laud as loudly as ignorant partisanship would demand.

This voluntary self-exclusion from the arena of literary debate may have been for the immediate advantage of the two novelists themselves; but it was indisputably to the disadvantage of the rest of us, who wanted to be as fully enlightened as to Turgenef's theory of fiction, as we had been, or were to be, informed about M. Zola's and Mr. Henry James's and Robert Louis Stevenson's. We should have been glad to know Flaubert's opinion about the art which he found so despairingly difficult and to which he devoted himself with so Benedictine a determination. To those of us who are keenly interested in any art, there is never any criticism so suggestive and so interpretative as that of the artist himself. Where is there any inquiry into the principles of painting so penetrative and so subtle as Fromentin's — unless perhaps it is Mr. John La Farge's?

Where is there any discussion of the elusive art of acting so acute and so stimulating as Cibber's — unless it is Mr. Joseph Jefferson's? Of a truth the critics are not "those who have failed in literature and art"; rather are they those who have succeeded; and when accomplished craftsmen are willing to talk freely about their calling, the rest of us had best keep silent and profit by what we can pick up.

It is well that we should be reminded now and again why it is that the artist always has precedence over the critic. Indeed, the artist must come first, or else the critic would have no subject-matter. All that the critic can be expected to do is to study the masterpieces in a vain search for the secret of their lasting beauty. And for this task, so difficult and so delicate, none are so fit as those fellow-craftsmen who happen also to have the faculty of articulate expression. Not every artist's opinion is worth having; for he may lack philosophy to understand not only his own processes, but even his own aims. It is not easy even for the intelligent artist — and how few artists, pictorial or literary, are really intelligent! — to disentangle the principles which, when he is at work, he is forever applying consciously or unconsciously or subconsciously. But even from those who have only a limited insight into their own methods and who have no firm grasp of the vital principles of their art, there is sometimes something to be gleaned by which the cautious enquirer can benefit. The contribution of any single artist may be narrow; and more often than not his theory will be found to be only an attempt to expound his own practice: it will discover itself only as the result of his own way of doing things, and not as the cause. The criticism of a fellow-craftsman is rarely without the color of a fellow-feeling; and we cannot fairly expect it to be achromatic. But none the less ought we to be able to profit by it.

Of all the American authors at the opening of the new century, Mr. Howells is easily the most multifarious. It is as a novelist that he has presented himself most frequently; but he has also attempted the stage, although no one of his original dramas has had the good fortune to establish itself in the theatre. He has revealed himself as a poet of sombre imaginations, not made visible elsewhere in his works. He has given us a series of charming books of travel. He is one of the most delightful of our essayists, with an exquisite felicity of phrase, akin to Heine's. He is one of the most delicate of our humorists, with a reserve that recalls Hawthorne's. And he is a constant critic of contemporary literature, gracious of manner and courteous of phrase, except when expressing his scorn of what seems to him unworthy, mean, and base.

Such of his critical writing as he has selected for the brief immortality of a book is contained in half a dozen volumes. The first of these, published in 1887, was given up to sympathetic appreciations of the "Modern Italian Poets"; and it is perhaps the closest approach he has ever made to criticism of the more formal and academic type. Acceptable as the volume was to readers of cosmopolitan culture, it was necessarily without the personal note which has made his later opinions more interesting to the average American, who has only a languid liking for the literature of other languages. This personal note was struck firmly in the tiny tome called "Criticism and Fiction," which was published in 1891. In this little book, made up out of earlier articles then first set in order, Mr. Howells said boldly what he thought about certain idols of the market-place; and probably no one was more surprised than he at the turmoil he created. To many placid creatures of habit, the publication of this little book was very like the explosion of a bomb in a reading-room; and the reverberation has not yet died out.

Most of us like to move through life along the line of least resistance; and we are inclined to resent any sudden call to think out the reasons for our opinions. Mr. Howells's declaration of the faith that was in him could not fail to shock many a prevalent prejudice; and at times his manner was not so persuasive as it might be — if, indeed, it was not fairly to be described as frankly aggressive. Himself free from the vulgar superstition of admiration for things once admired but no longer admirable, Mr. Howells wasted no perfunctory praise on what he had described as "those classics common to all languages — dead corpses which retain their forms perfectly in the coffin, but crumble to dust as soon as exposed to the air." He did not foresee that his plain speech about these unwholesome inheritances from our fathers would savor of impiety; that it would seem to some almost like a violation of the sanctity of the tomb.

As so often happens in cases of like character, when we go back to see what it was that caused all this commotion half a score of years ago, we have some difficulty in discovering just where the dynamite was concealed. We see that the little book is plainly too insistent in its tone, too intolerant of the dullards, too impatient with those who persist in liking the things they ought not to like and in disliking the things they ought not to dislike, and who have no health in them. But it is not so very iconoclastic after all, even if we do detect a desire to "speak disrespectfully of the equator." At bottom all that Mr. Howells had done was to voice once again the demand that art, and more especially the

art of fiction, should deal with life simply, naturally, and honestly. This has ever been the watch-cry of the younger generation in every century. It is what the more open-minded of mankind have been striving for ever since the earliest of critics was able to compare the second artist with the first to the disadvantage of the second. A protest against sham and shoddy, a plea for sincerity, it could not help being very like the hundreds of other pleas and protests, apologies and prefaces, with which the histories of literature are filled.

Mr. Howells's plea and protest was straightforward and plain spoken. The novelist should deal truthfully with his material, which is human life in all its breadth and in all its depth. He should not sophisticate it, nor should he in any wise attempt to idealize it. He is to be a witness sworn to tell the truth, the whole truth, and nothing but the truth. "The object of a novel should be to charm through a faithful representation of human actions and human passions, and to create by this fidelity to nature a beautiful work" — according to the pertinent dictum which Mr. Howells translated from Señor Valera. The novelist should deal with the mean of human life, and not with the exceptional, the abnormal, the monstrous, or else he will surely violate just proportion and present but a distorted vision of the world as it really is.

Above all, he will set up no false ideals of self-sacrifice, of heroism, of strength, of passion; for who is the novelist that he shall presume to improve upon human nature as it is? It was Emerson who said with his pithy shrewdness that "the foolish man wonders at the unusual, but the wise man at the usual"; and Carlyle it was who declared that for grown persons reality was the only genuine romance. The novelist must beware of begetting high-strung and supersensitive ideals of life which falsify the simpler and saner ideals. He must refrain from the wild, the visionary, the exaggerated, the freakish. He must deal with man as he sees him and with woman as he sees her; observing carefully, with whatever insight and imagination he may have, and then recording faithfully the things of good report and the things of evil report. He must keep his pages free from the hectic flush, which follows when passion is exalted above principle. Though he must needs show sin and sorrow and suffering, he can never palter with the everlasting standards of right and wrong.

Before any work of the imagination there is one imperative question: "Is it true — true to the motives, the impulses, the principles that shape the life of actual men and women?" And "this truth," Mr. Howells declares, "which necessarily includes the highest morality and the high-

est artistry — this truth given, the book cannot be wicked and cannot be weak; and without it all graces of style and feats of invention and cunning of construction are so many superfluities of naughtiness." Although this is more pungently put, there is nothing so new in this, nothing that many earlier writers had not striven to say as best they could; and, had Mr. Howells confined himself to preaching again the eternal verities, it may be that this sermon of his would have aroused as few of his auditors from their slumbers as other sermons are wont to do.

But Mr. Howells waked up the congregation by making a direct personal application of his principles — by naming names, by pointing out how Scott and Dickens and Thackeray had strayed from the path of truth. Then the British journalists, always supersensitive to American criticism, rose in their rage and emptied the vials of their wrath on the head of the American novelist, as they had years before cried out shrilly at a chance remark of an American romancer. Mr. Howells had instant proof of the pertinence of his own remark that "whatever is established is sacred for those who do not think." Not only did the rash American writer bring out the defects of the sacredly established Scott and Dickens and Thackeray, but he dared to express his own preference for Jane Austen and for Anthony Trollope. He even went farther, and said boldly that certain Russians and Spaniards and Italians set a better example than any then to be had in the English language.

The same beliefs inspired the next volume of criticism, a book far less polemic in tone, or at least less militant, but quite as individual and as sturdy. "My Literary Passions," published in 1895, was pleasantly novel in form; it was a discursive record of the fleeting impressions made on Mr. Howells as he had discovered for himself one after another of the authors the world has agreed to accept as great. It was frankly an attempt to set down the personal equation. All criticism must be more or less autobiographic, even when the writer is most confident that he has succeeded in stepping off his own shadow. Nowadays it savors of conceit for any critic to maintain that he has been able to take himself out of the way, and that he is merely the medium through which the final judgment of mankind is expressing itself. "The adventures of one's soul in contact with masterpieces" — this is one of M. Anatole France's definitions of criticism; and it is good that a critic should have a soul, and better that he should keep it in contact with masterpieces as constantly as may be. In "My Literary Passions" Mr. Howells was as little academic as M. France himself; and he was also as sympathetic and as honest. He was aiming not so much to warn us against what he

held to be noxious as to help us to enjoy what he found most refreshing and most nourishing.

Autobiographic also was the volume called "Literary Friends and Acquaintance," which was issued in 1900. In this personal retrospect Mr. Howells began by chronicling his first visit to New England and his earlier impressions of New York and Boston. Then he set down his reminiscences of Holmes and Longfellow and Lowell, a record of their conversation, and a summary of their characteristics likely still further to increase the affection in which they are held. No other appreciations of these significant figures have been more intimate or more cordial; none have been lightened by a more graceful vivacity. To the young man from the West these were the giants of the East, to be approached as Heine approached Goethe. That they were his countrymen made them only the more worthy of devotion, for the years of residence abroad had not denaturalized Mr. Howells. Even now he is not cosmopolitan, except in his artistic equipment, in his æsthetic inspiration; he is intensely American, irresistibly American; and he is never conceivably anything else.

"Heroines of Fiction" is the title of Mr. Howells's latest series of essays in criticism, and there is ingenious novelty in its scheme. It is an attempt to sketch the development of the fiction of our language in the nineteenth century by centring the attention of the reader upon the heroines, upon the fair creatures whom the heroes love and who by them are beloved again. It is a study of the evolution of the modern novel in which the stages of advance are marked by the increase in the insight, the sympathy, and the skill with which the successive masters have been able to body forth the ever-womanly. Mr. Howells holds that "a novel is great or not, as its women are important or unimportant." He holds also that truth is the one thing needful, and he is therefore not surprised to discover in his wanderings down the history of fiction that "apparently the ever-womanly refuses herself to the novelist who proposes anything but truth to nature; apparently she cannot trust him. She may not always be so very sincere herself, but she requires sincerity in the artist who would take her likeness, and it is only in the fiction of one who faithfully reports his knowledge of things seen that she will deign to show her face, to let her divine presence be felt. That is the highest and best fiction, and her presence is the supreme evidence of its truth to the whole of life."

"Heroines of Fiction" is as candid and as uncompromising as "Criticism and Fiction;" but it is far mellower in tone and its touch is almost

caressing, as is becoming in a book pervaded by the presence of the ever-womanly. It is insinuating often, and it is rarely so rasping as was the earlier declaration of the same doctrine. It is more likely to win readers to think for themselves — and perhaps even to think scorn of themselves for their former relish for the quasi-romantic and the pseudo-heroic. Of course, it would be easy enough to detach judgments certain to evoke shrill protests from amiable readers too indolent to do their own thinking. It will be a shock to some to see George Eliot and Anthony Trollope set up as more representative British novelists than Dickens and Thackeray, as it will surprise others to note that Fielding portrays characters of a certain kind with "blackguardly sympathy." It must be confessed that this last phrase is doubtfully felicitous; and, even when we understand why it was uttered, we may still wonder whether it was not too one-sided, not to call it unfair. Apparently what Mr. Howells resents is the hearty animality of "Tom Jones," the rank coarseness of its masculinity.

On the other hand, Mr. Howells is tolerant toward Richardson, who seems on the whole sickly, whereas Fielding was on the whole healthy, as the barnyard is after all more wholesome than the hot-house. Fielding drew men as he saw them, clearly and honestly, while Richardson was above all a master of feminine psychology. Perhaps this accounts for the odd preference of Mr. Howells, who, although he has drawn men of a convincing veracity like Silas Lapham and Bartley Hubbard, has delighted especially in an analysis and a synthesis of woman. So also we may deem him unduly harsh in his condemnation of Thackeray for the confidential attitude which was perfectly natural to the author of "Vanity Fair," while he shows himself strangely tolerant toward Trollope, in whose works this confidential attitude is a borrowed artifice which some readers find perpetually exasperating. Trollope, again, whatever his merits, which were many and various, had one irredeemable vice — he was forever confessing carelessly that it was only a fiction he was telling. For a novelist this is the unpardonable sin.

Mr. Howells stands on less debatable ground when he is exposing the slovenliness of Scott's style and structure, and when he is calling attention to the thin theatricalism of Dickens in those scenes of empty effectiveness in which the author of the "Tale of Two Cities" revelled with an enjoyment that seemed almost sensuous. Mr. Howells has the firm earth beneath his feet, he is standing on the everlasting rock, when he protests against the "idiotic and detestable self-sacrifice" which "is preached in fiction," and when he points out that Lady Castlewood,

already conscious that she does not love Esmond any longer as a son, is falsely made to promote his passion for her daughter. "This is a little too repulsive for belief"; just as in Dickens's tale we now reject what we once accepted, "the atrocious and abominable notion of Sidney Carton seeking to be guillotined in place of the husband of the woman he loves." And, as Mr. Howells says in another part of the book, it is well for the author to force his readers to think, which they do unwillingly, but which is often the best thing they can do; "to feel is comparatively cheap and easy."

The limitations of Mr. Howells's criticism are not merely the limits of his likings. He is no drifting impressionist with never an anchor to windward. He has a solid body of doctrine; he has a creed of his own to serve as a test. But his criticism, like that of most other critics, is at its best when it is affirmative rather than negative. It is most useful and significant when it is constructive, and its utility is least when it is most destructive; and here again it is like that of most other critics. It is profitable for us to be reminded that it was Maria Edgeworth and Jane Austen, estimable maids with a delicious sense of humor, transcending the ordinary portion of woman, that first "imagined the heroine who was above all a Nice Girl" — the Nice Girl "who still remains the ideal of our fiction" and "to whom it returns, with a final constancy, after whatever aberration." It is advantageous to have it clearly stated that "in fiction women exist in the past, present, or future tense, the infinitive, indicative, potential, or imperative mood of love-making"; or "otherwise they do not exist at all, and no phantom of delight, masquerading in their clothes, suffices."

It is valuable to have our attention called to the fact that it was Charles Reade who first "perceived that there is something feline in every woman," and that "he also divined that in many and perhaps in most cases she wishes to use the arts of the cat for no worse purpose than getting a soft place in a man's soul and sweetly purring there." It is instructive to be told that "novelists ought not to have their favorites among their creations, as parents ought not to have their favorites among their children"; and there is no denying that "George Eliot has her preferences most distinctly" and that "she pursues some of her women with a rancor as perceptible as her fondness for others." And it is very suggestive to have it made plain that Trollope "has not shown the subtlest sense of womanhood; his portraits do not impart the last, the most exquisite joy; it is not the very soul of the sex that shows itself in them; but it is the mind, the heart, the conscience, the manner; and

this is for one painter enough. Let Jane Austen catch their ultimate charm, and George Eliot their ultimate truth, and Hawthorne their farthermost meanings and intimations; Trollope has shown them as we mostly see them when we meet them in society and as we know them at home."

These quotations serve to show that Mr. Howells's criticism is often technical, not of structure only — although his technical criticism of form is abundant and acute — but more often of the handling of character; and after all it is by the handling of character that a novelist stands or falls. His form may be faulty and his manner may be careless — and here are two of the defects of the earliest very great novel, "Don Quixote." But if he can handle character so as to give the reader the full impression of life, then has he a chance of immortality. Other things he needs also, but this one is essential. It is because Cervantes could handle character with a large certainty and with searching imagination that "Don Quixote" survives, and even the slovenly conduct of the story cannot prevent. Scott, Dickens, and Thackeray could also handle character, each in his several way; and this is why they have been enrolled among the masters of fiction, even though no one of them had said the final word of his art, any more than Cervantes had said it.

However great Scott was, and Dickens, and Thackeray, they were none of them perfect artists; they were great in spite of gross derelictions from the highest standard. This is what Mr. Howells has tried to make plain even to careless readers; and it is for making this plain that careless readers are not willing to forgive him. Nothing is more certain to arrest progress than a smug satisfaction with the past — unless it is a slavish copying of the inferior models bequeathed to us by our more primitive predecessors. Nothing is more helpful than a clear understanding of the merits and of the demerits of the early masters. The merits are obvious enough, but the demerits need to be discovered and declared before they can serve as warnings. It is not a paradox but a truism that the art of fiction is a finer art to-day than it was when Thackeray was writing — just as it was a finer art in Thackeray's time than it was when Cervantes was writing. As Mr. Howells puts it pithily, it was the misfortune of Balzac that he "lived too soon to profit by Balzac"; and so Cervantes had lived too soon to profit by Cervantes. Those who refuse blindly to see any blemishes in the art of Balzac or of Cervantes, those who persist in upholding Scott and Dickens and Thackeray as impeccable artists, need to be reminded that ancestor-worship is no longer esteemed the highest form of religion.

It may be said that Mr. Howells has sometimes seemed somewhat over-strenuous in dwelling upon the errors and the mistakes of the earlier masters; and this charge may be admitted without hesitation. He has had to combat accepted opinions, and the combative mood tempts us to an over-statement of our own case and an under-statement of that of our opponents; and quite possibly Mr. Howells has yielded to this temptation oftener than needful. It has been urged also that Mr. Howells has shown himself careless of proportion, in that he has over-praised certain of his contemporaries while over-dispraising certain of his predecessors; and it may be admitted that this charge has now and then some slight evidence in its favor. Just as he drew attention to the defects of certain novelists of the past, so also he drew attention to the beauty and the truth which he saw in the work of certain writers of the present, and which the duller senses of the public had not recognized adequately. But they are very careless readers indeed who have asserted that Mr. Howells really sets up Mr. J. W. De Forest as the rival of Thackeray and that he holds Mr. H. B. Fuller as an equal of Balzac. They are not only careless, but perhaps a little stupid also, and even a trifle malevolent.

Yet, as the majority of readers, even of criticism, are always more or less careless, it may be that Mr. Howells himself has not been careful enough in the use of his scale. If by his inadvertence he has aroused animosity, where by a greater caution he might have won adherence, it is greatly to be regretted, not so much for his sake as for the sake of the readers themselves, who may allow prejudice to prevent their acceptance of the doctrines which Mr. Howells is setting forth. These doctrines may seem new in some of their applications, but they are old and eternal; they are rooted in the truth, and the truth will surely prevail.

Mr. Howells does not declare his theories merely to celebrate himself, as M. Zola has been accused of doing. He declares them rather because his character is forever forcing him to bear witness to the truth as he sees it. In criticism as in fiction character counts for as much as talent — in fact, character is an element of talent. It matters little whether Mr. Howells is dealing with the art and mystery of novel-writing or whether he is himself applying the secrets of the craft; we get the same impression of the man — a man of a large nature and of a transparent sincerity, liberal in his appreciations, loyal to his convictions, and little hampered by mere academic restrictions.

BRANDER MATTHEWS.

## WRITERS IN THE JANUARY FORUM.

Hon. John Charlton, M.P., was born near Caledonia, N. Y., in 1829, of English and Scotch parentage. Was educated in New York, and moved with his father to Canada in 1849. Went into the mercantile and lumbering business in 1853, and is still actively engaged in it. Was elected a member of the Canadian House of Commons in 1872, and has since been continuously a member of that body. Is an advanced Liberal, and has always advocated closer relations with the United States. Is a high financial authority in Canada, and a publicist of repute. Is the leader in the Canadian parliament in moral legislative movements, and is a member of the Anglo-American Joint High Commission.

Hon. William Torrey Harris was born at North Killingly, Conn., in 1835, was educated at sundry academies, and for two years and a half was a member of Yale College in the class of 1858. In 1869 the College bestowed upon him the degree of A.M., and, in 1895, the degree of LL.D. Established in 1867 the "Journal of Speculative Philosophy." Dr. Harris was superintendent of public schools in St. Louis from 1867 to 1880, and since 1889 has been United States Commissioner of Education.

Rev. William DeWitt Hyde was born at Winchendon, Mass., in 1858. Was educated in public schools and Phillips Exeter Academy. Graduated from Harvard in 1879. Is D.D. and LL.D. of Syracuse University. Has been President of Bowdoin College since 1885. Is the author of "Practical Ethics," "Social Theology," "Practical Idealism," and other works.

Prof. Brander Matthews, born at New Orleans, La., in 1852, was graduated from Columbia College in 1871, and in 1892 was appointed to the chair of Literature in that college. Prof. Matthews is the author of numerous works of criticism and fiction and of several dramatic compositions.

Mr. Earl Mayo was born at Springville, N. Y., in 1873. Graduated from Cornell University in 1894. For the year following was an instructor in the Department of English at Cornell, at the same time pursuing his post-graduate studies in social and political science. Removed to New York, where he joined the staff of the "New York Sun," and later occupied an editorial position with the S. S. McClure Company.

Mr. Elwood Mead is a native of Indiana. Graduated from Purdue University in 1882, and pursued post-graduate studies in civil engineering at the Iowa State College. Is a member of the American Society of Civil Engineers and a consulting engineer in irrigation and water-supply engineering in the Rocky Mountain States. Has been successively United States Assistant Engineer in river and harbor improvements, Professor of Irrigation Engineering in the Colorado Agricultural College, Assistant State Engineer of Colorado, and Territorial and State Engineer of Wyoming. Is now Expert in Charge of Irrigation Investigations in the office of Experiment Stations, of the United States Department of Agriculture, and holds a Professorship

in the University of California. Is the author of the Wyoming Irrigation law, and of the water-right provisions of the State constitution. Has written a number of reports for the State and for the national Government on the land and water problems of the arid region.

REAR-ADMIRAL GEORGE WALLACE MELVILLE was born at New York in 1841. Was educated at the Brooklyn Polytechnic Institute. Entered the United States Navy as assistant engineer in 1861, and served through the Civil War. Headed the expeditions which recovered the records of the Jeannette expedition. In 1890 was gold medallist and advanced fifteen numbers by special act of Congress for bravery in Arctic. Was appointed Engineer-in-chief in 1887, and reappointed in 1892 and 1896. In 1899 was appointed Rear-admiral. Has invented many mechanical appliances. Is President of the American Society of Mechanical Engineers.

MR. SUNYOWE PANG was born in the Canton district of China about thirty-five years ago. Has been a resident of the United States for the last eighteen years, and has married an American. Was at first a resident of San Francisco, but has been for several years in business in New York. Has followed with the closest interest the political course of China as well as the progress of his Chinese brethren in America. Is an adherent of the liberal Chinese party, which, through its educated representatives in this country, has done much to set China herself on the road to modern progress. Mr. Pang has embraced the Christian faith.

PROF. PAUL S. REINSCH was born in Milwaukee, Wis., in 1869. Was educated at the University of Wisconsin, and studied contemporary politics in England, Germany, France, and Italy. Is Professor of Political Science in the University of Wisconsin. Has published monographs on the common law in the American colonies and on "French Experience with Representative Government in the West Indies," and a book on "World Politics at the End of the Nineteenth Century."

MR. JACOB SCHOENHOF was born in Germany in 1839. Came to America in 1861, was naturalized in 1866, and followed a commercial career up to 1885. His experience in trade and manufacturing soon brought him to recognize the antagonism of facts with the generally accepted economic views. As early as 1869 he published in German periodicals his views on the errors of economic theories. President Cleveland appointed him Consul to Tunstall, England, and gave him a commission to inquire into the state of technical education and the economy of production in Europe. Mr. Schoenhof is the author of "Wages and Trade" (1885); "The Economy of High Wages" (1892); "History of Money and Prices" (1896), etc.

HON. JOHN F. SHAFROTH was born in Fayette, Mo., in 1854. Entered the University of Michigan in 1872, and graduated in the literary department in 1875. Was admitted to the bar in 1876, and practised law until 1879 at Fayette, and afterward at Denver, Col. Was elected city attorney of Denver in 1887, and reëlected in 1889. Has been in many important cases before the Supreme Court of the State of Colorado. Has been a member of Congress since 1894. His speeches upon the Philippine policy, the War in the Transvaal, and Bimetallism attracted considerable attention, and were published in whole or in part by many papers.

MR. MARRION WILCOX was born in Georgia in 1858. Was educated at Yale University, and graduated in 1878. Is an LL B. of Hamilton College, and has been admitted to the New York Bar. Has studied history abroad, and was an instructor at Yale University. Since 1893 has been writer and editor in New York city. Is the author of "A Short History of the War with Spain," and of a "History of the War in the Philippines."